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**San Bernardino County
Investment Summary
Quarter Ending March 31, 2016**

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Market Environment Update and Outlook



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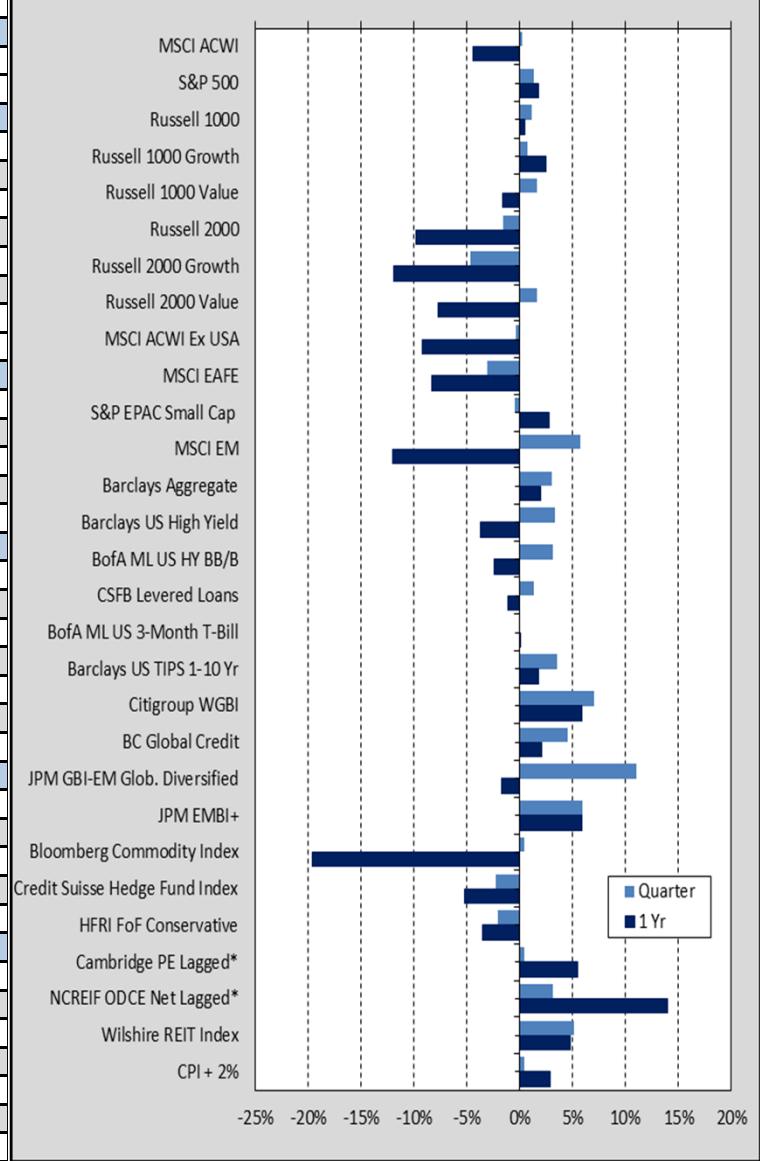
- **Fourth quarter GDP growth rate (third estimate) printed at a modest 1.4%.**
 - Retail sales ended February at +3.1% on a year-over-year growth rate basis. In the same period last year the YoY growth rate was 1.2%.
 - The inventory-to-sales ratio ended February was flat at 1.4 and has remained relatively flat since early 2010.
 - Corporate profits (ended October) as a percent of GDP declined slightly to 9.3% from 9.9% and remain elevated relative to historical levels.
 - The U.S. trade deficit widened 2.6% in February due to increased imports.
- **The unemployment rate remained unchanged at 5.0% in Q1; U-6, a broader measure of unemployment, fell to 9.8% during the first quarter.**
- **The Case-Shiller Home Price Index (ended January) increased slightly to 175.4 from 175.3 September and is at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally adjusted CPI increased to 0.8% from 0.06% at the end of December; Capacity Utilization decreased to 74.8 in March from 75.4% in December.**
- **Fed Funds rate was unchanged at 0.50%. The 10-year Treasury Yield (constant maturity) finished Q1 at 1.9% down from 2.2% ended December.**
- **The Fed balance sheet decreased slightly during Q1 2016, while the European Central Bank balance sheet continues to increase.**
 - ECB cut interest rates to -0.4% and expanded asset purchases from €60 billion to €80 billion per month.
- **S&P valuations decreased in March remaining above the 10-year and long-term averages**
 - Cyclically adjusted Shiller PE ratio (25.38x) is above the long-term average of 16.6x and above the 10-year average of 22.8x.
- **Global currencies strengthened against the dollar amid commodity price stabilization and investor confidence.**

San Bernardino County Employees' Retirement Association

Market Environment – Q1 2016 Overview

		<u>Qtr.</u>	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
World Equity Benchmarks						
MSCI ACWI	World	0.2%	-4.3%	5.5%	5.2%	4.1%
		<u>Qtr.</u>	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
Domestic Equity Benchmarks						
S&P 500	Large Core	1.3%	1.8%	11.8%	11.6%	7.0%
Russell 1000	Large Core	1.2%	0.5%	11.5%	11.4%	7.1%
Russell 1000 Growth	Large Growth	0.7%	2.5%	13.6%	12.4%	8.3%
Russell 1000 Value	Large Value	1.6%	-1.5%	9.4%	10.2%	5.7%
Russell 2000	Small Core	-1.5%	-9.8%	6.8%	7.2%	5.3%
Russell 2000 Growth	Small Growth	-4.7%	-11.8%	7.9%	7.7%	6.0%
Russell 2000 Value	Small Value	1.7%	-7.7%	5.7%	6.7%	4.4%
		<u>Qtr.</u>	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	-0.4%	-9.2%	0.3%	0.3%	1.9%
MSCI EAFE	Int'l Developed	-3.0%	-8.3%	2.2%	2.3%	1.8%
S&P EPAC Small Cap	Small Cap Int'l	-0.4%	2.8%	7.9%	5.9%	4.5%
MSCI EM	Emerging Equity	5.7%	-12.0%	-4.5%	-4.1%	3.0%
		<u>Qtr.</u>	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	3.0%	2.0%	2.5%	3.8%	4.9%
Barclays US High Yield	High Yield	3.4%	-3.7%	1.8%	4.9%	7.0%
BofA ML US HY BB/B	High Yield	3.1%	-2.4%	2.5%	5.2%	6.5%
CSFB Levered Loans	Bank Loans	1.3%	-1.1%	2.2%	3.5%	4.0%
BofA ML US 3-Month T-Bill	Cash	0.1%	0.1%	0.1%	0.1%	1.1%
Barclays US TIPS 1-10 Yr	Inflation	3.6%	1.8%	-0.7%	1.9%	4.0%
		<u>Qtr.</u>	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
Global Fixed Income Benchmarks						
Citigroup WGBI	World Gov. Bonds	7.1%	5.9%	0.5%	1.2%	4.2%
BC Global Credit	Global Bonds	4.6%	2.1%	1.6%	3.3%	4.8%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local)	11.0%	-1.6%	-6.7%	-2.0%	5.0%
JPM EMBI+	Em. Mkt. Bonds	5.9%	5.9%	2.8%	6.1%	7.1%
		<u>Qtr.</u>	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
Alternative Benchmarks						
Bloomberg Commodity Index	Commodity	0.4%	-19.6%	-16.9%	-14.1%	-6.2%
Credit Suisse Hedge Fund Index	Hedge Fund	-2.2%	-5.2%	2.4%	2.7%	4.2%
HFRI FoF Conservative	Fund of Funds	-2.0%	-3.5%	2.1%	1.7%	1.4%
Cambridge PE Lagged*	Private Equity	0.4%	5.5%	12.5%	12.5%	11.4%
NCREIF ODCE Net Lagged*	Real Estate	3.1%	14.0%	12.8%	12.6%	5.6%
Wilshire REIT Index	REIT	5.2%	4.8%	11.1%	12.1%	6.3%
CPI + 2%	Inflation/Real Assets	0.4%	2.9%	2.8%	3.3%	3.8%

* As of 12/31/2015



Global Equity

- **U.S. equities posted modest gains in the first quarter (+1.3%) rallying in March from a rocky beginning to 2016.**
- **Small cap stocks underperformed large cap stocks during the quarter, with the Russell 2000 Index returning -1.5% and the Russell 1000 Index returning 1.2%.**
- **International equities underperformed U.S. markets during the quarter, returning -0.4%, as measured by the MSCI ACWI ex-U.S. Index. Emerging markets returned 5.7% as measured by the MSCI Emerging Markets Index in U.S. dollar terms.**
 - Developed international markets returned -3.0% as measured by the MSCI EAFE Index.

Private Equity

- **Private equity fundraising totaled \$130.5 billion in Q1 2016.**
- **Buyout and Special Situations fundraising totaled \$48.1 billion in Q1 2016.**
 - 55% of fundraising activity was in North America, 42% in Europe and 2.7% in Asia/Emerging Markets.
- **Venture capital fundraising totaled \$9.2 billion.**
 - VC fundraising as a percent of total new PE funds is in line with historical post-dot com levels at approximately 14%.
- **Fund of fund and multi-manager co-investment fundraising totaled \$7.8 billion.**
- **Growth equity fundraising totaled \$3.4 billion.**

Fixed Income

- **The yield curve shifted down for maturities greater than 6 months. Intermediate yields decreased 44-49 basis points and long duration yields decreased 40 basis points.**
- **The spread between two and 10-year rates decreased to 105 basis points from 121 basis points ended March. Treasury Inflation-Protected Securities, or TIPS, returned +3.6% during the quarter, as measured by the Barclays US TIPS 1-10 Yr Index.**
- **The Barclays Long Duration Credit Index gained +6.82% as the long end of the curve ended the quarter 40 basis points lower.**
- **Long Treasuries gained +8.49% and investment-grade corporate debt gained 3.03%.**
- **The Barclays 1-3 year Government/ Credit Index returned +0.97% and US high yield bonds gained +3.4%.**
- **Emerging markets debt gained broadly and were especially pronounced in local currency as relative dollar weakness spurred strong gains.**
 - US dollar-denominated debt, as measured by the JP Morgan EMBI Index, gained 5.9%; local currency debt gained +11.0%, according to the JP Morgan GBI-EM Index.

Real Assets/Inflation-Linked Assets

- **Massive energy market dislocation.**
 - Seek inflation sensitive asset classes that offer positive yield
 - Oil prices stabilizing and remain low.
 - Private equity and private debt opportunities may be relatively attractive.
 - Potential for public stressed/distressed credit, equity and commodity plays.
- **OPEC, Saudi Arabia and oil producing countries continue to show a willingness to allow lower oil prices to persist in efforts to cement market share and reduce marginal supply.**
- **Select infrastructure opportunities showing signs of being attractive.**
 - Target opportunistic strategies in niche sub-sectors to take advantage of market dislocations.
 - Secular opportunities may exist within the shipping industry as traditional financing sources (both debt and equity) are less abundant
- **Timber opportunities remain elusive.**
 - Income yields (net) are low as assets are predominantly traded between like-minded institutions
 - Private strategies are illiquid and constrain quick entrance/exit (i.e. long-term lock-up)
 - Liquid strategies have limited pure timber exposure (and limited active-play options)

Commodities

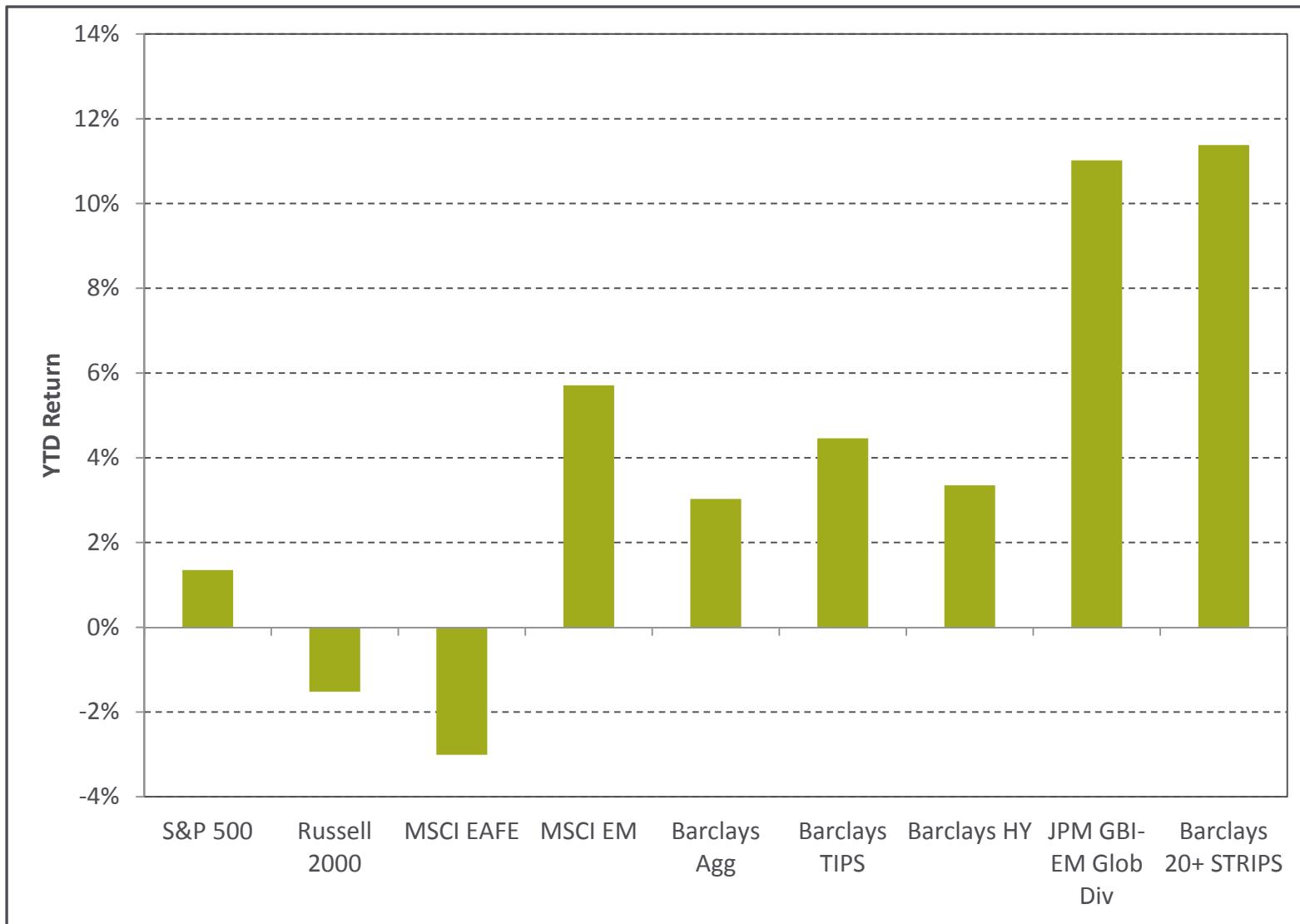
- **Commodities ended quarter with a meager +0.51% as measured by the Bloomberg Commodity Index.**
 - Volatility continued in oil markets as price discovery continues into 2016 with oil reaching multi-year lows in February preceding a rebound in March.
 - Precious metals were the best performing group appreciating nearly 9.5% on average.

Real Estate

- **NEPC continues to be neutral on core real estate in the US and remains positive on non-core real estate, that is, value-add and opportunistic strategies.**
- **Within U.S. core real estate, strong fundamentals continue to be the story along with attractive income spreads relative to interest rates.**
 - Real estate fundamentals and debt terms are attractive, however valuations are high and the possibility of rising interest rates and the impact on cap rates causes concern.
- **Overall, the non-core real estate investment environment in the U.S. is normalizing; however, select areas remain attractive.**
- **Europe is viewed as the best place for a marginal dollar of non-core real estate investment.**
 - Europe is emerging from multi-year recession, but recovery is slow and uneven with global markets experiencing large capital inflows.
 - Banks in EU are still overleveraged and have significant real estate exposure to jettison.

San Bernardino County Employees' Retirement Association

Year to Date Performance – Sharp Market Rally Masks Scale of Recent Sell-Off

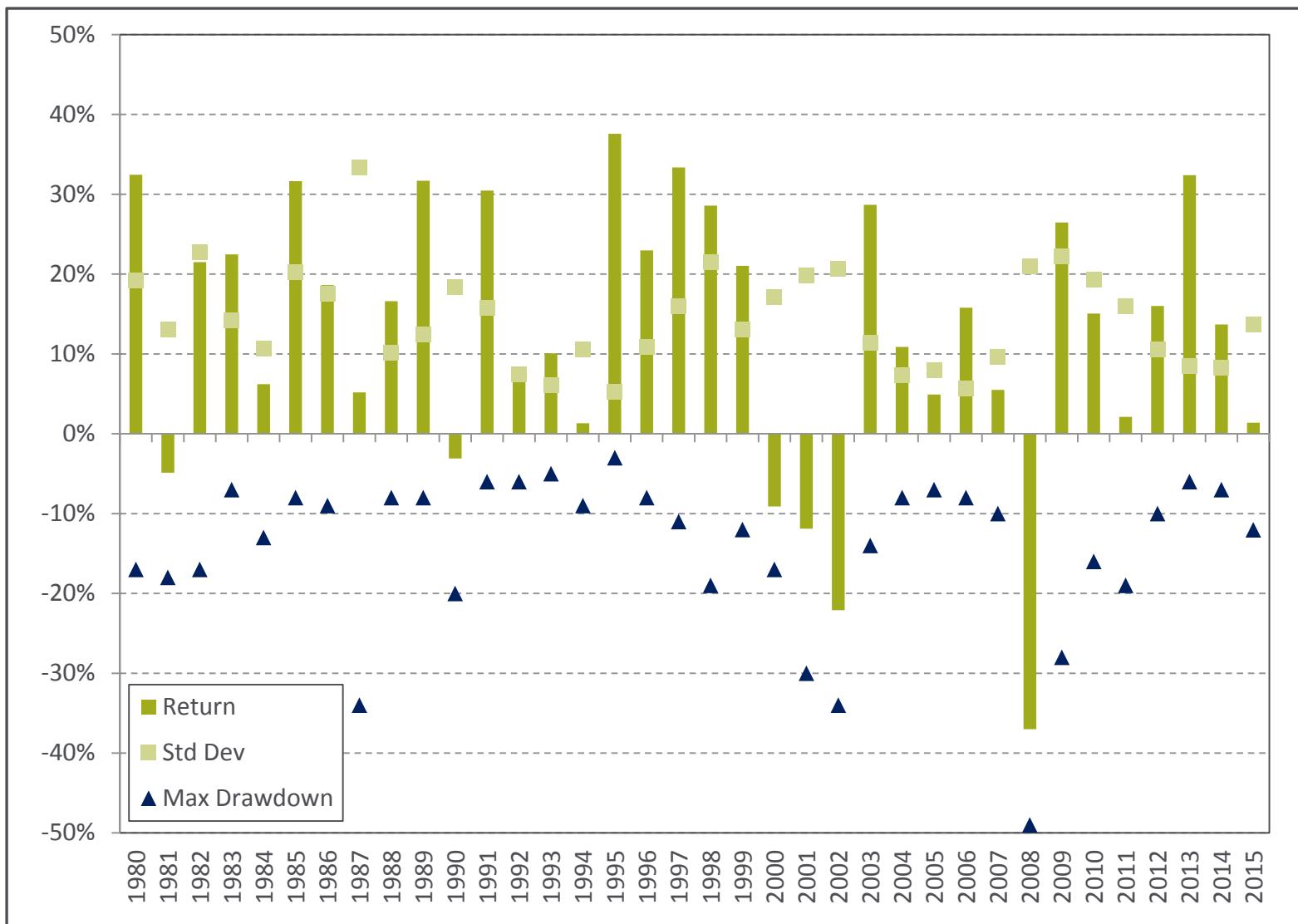


Source: Morningstar Direct



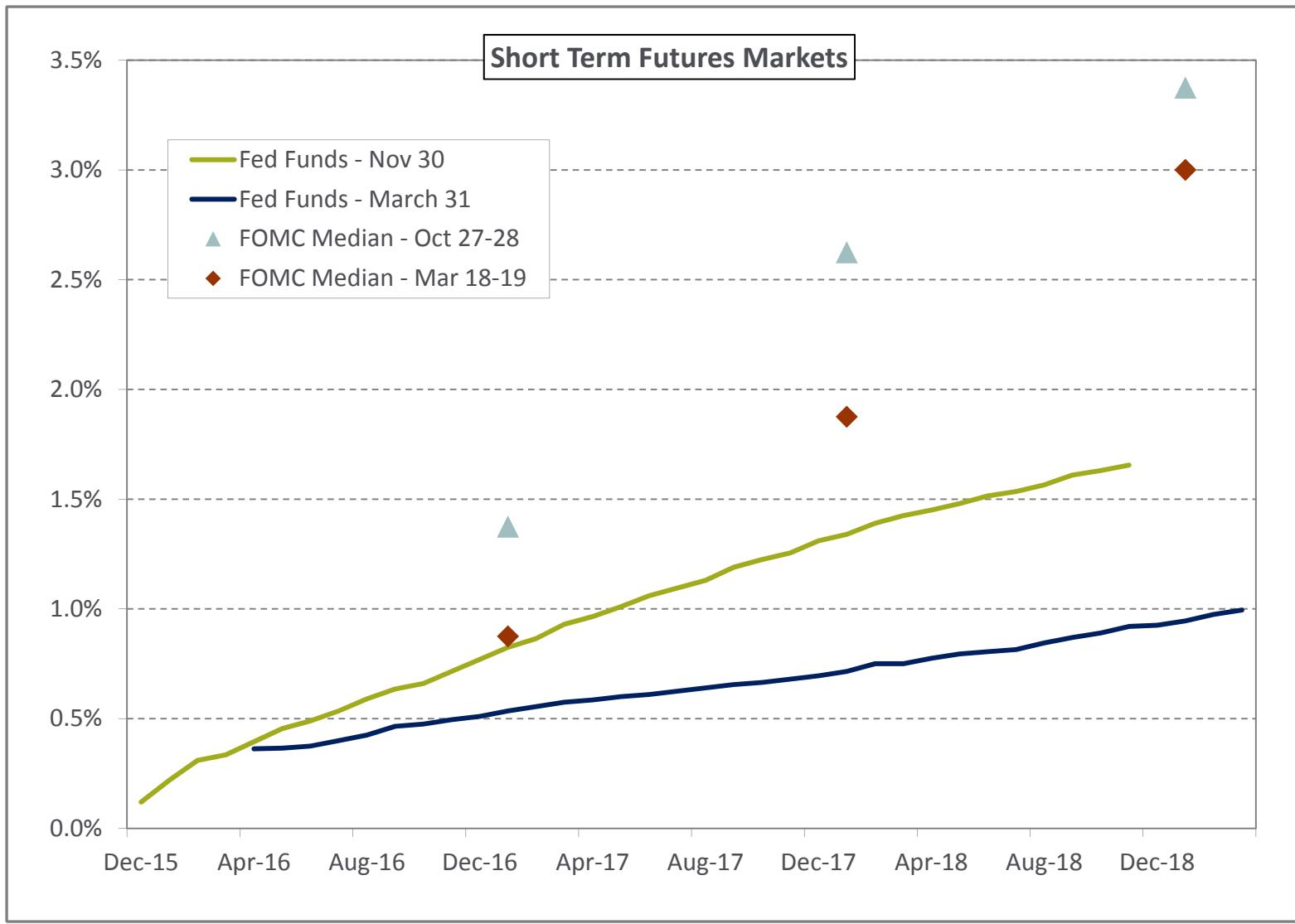
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Source: Standard & Poors, Bloomberg

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Fed Funds Curve and FOMC Appropriate Pace of Policy Firming Has Moderated



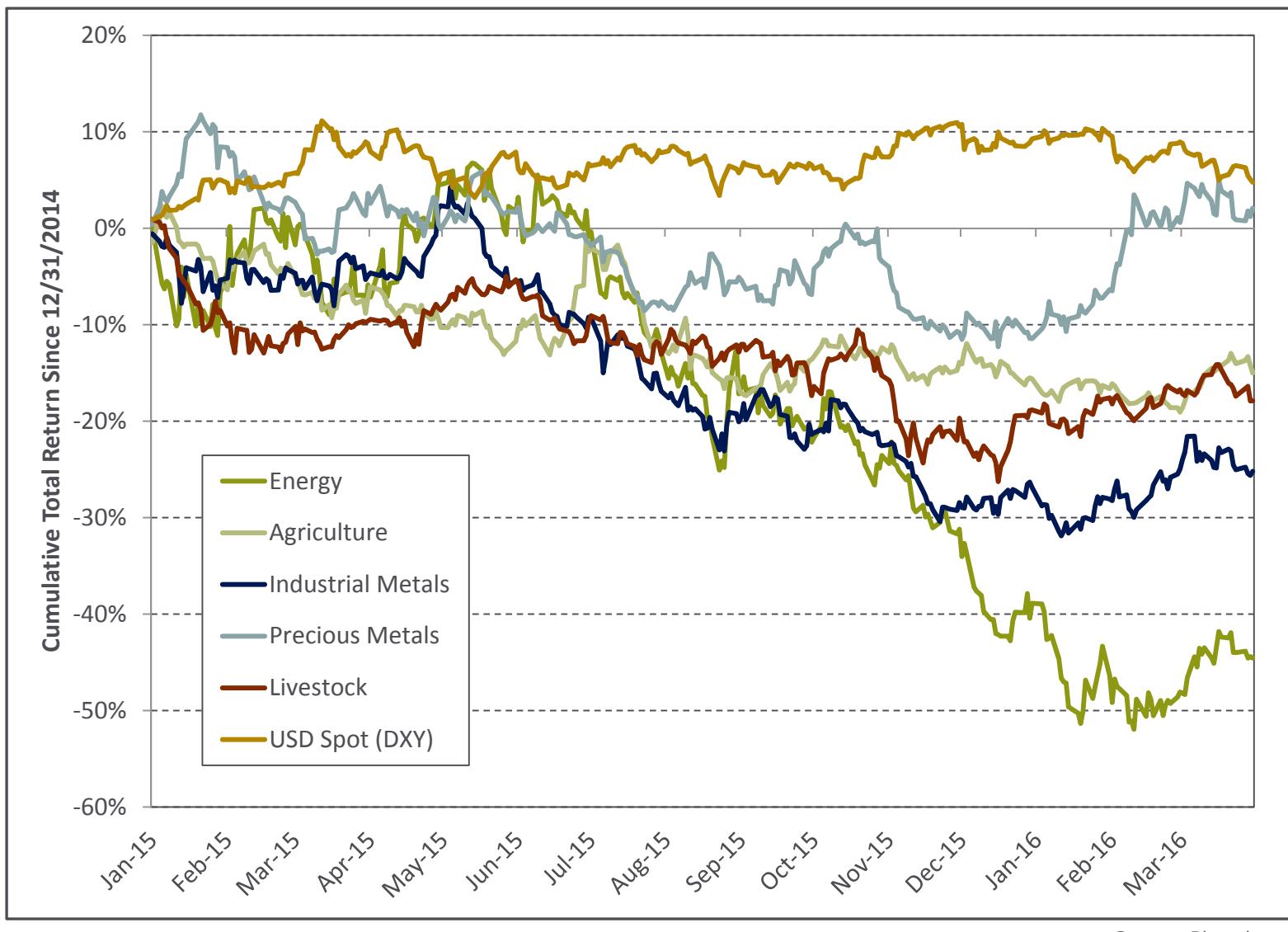
Source: Federal Reserve, Bloomberg



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Stabilizing Commodity Returns are Positive for EM



Source: Bloomberg



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- **Prospects of low US core bond returns warrant a more positive tilt to US equity, especially following sell-offs**
 - Macro policy remains supportive but corporate earnings quality is deteriorating
 - Lower returns expected but pockets of opportunity can be found in US equity and credit
- **Overweight non-US developed market equities**
 - Central bank support and dollar strength provide a positive economic backdrop
 - Small-cap equities offer purest opportunity to benefit from local earnings recovery
 - EAFE equity markets offer the potential for strong returns relative to US equities
- **Overweight emerging market small-cap and consumer focused strategies relative to broad equity mandates**
 - Valuations and long-term fundamentals suggest a strategic overweight
 - China uncertainty, dollar pressure and idiosyncratic country risks temper excitement
- **Seek tactical fixed income strategies but preserve duration exposure**
 - US duration continues to have a role in a diversified and risk-aware portfolio
 - TIPS offer an attractive duration profile with inflation expectations at secular lows
 - Credit selection is critical as credit cycle matures and spreads contract in recent rally
- **Private market opportunities are the preferred access point as energy market distress continues to evolve**
 - Return opportunities of private strategies are compelling but suggest patience

NEPC Updates

March 31, 2016

Highlights of First Quarter Happenings at NEPC

NEPC Research

Recent White Papers

- 2016 First Quarter Market Thoughts
- Market Chatter: Is it really All About China? (January 2016)
- Market Chatter: Monetary Policy Divergence and Developed Currency (April 2016)

Upcoming Events

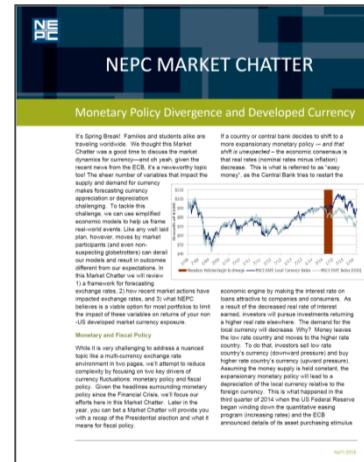
- 'Opportunities for Future Investments' is the theme for NEPC's 21st Annual Investment Conference – May 10-11, 2016 at the Hynes Convention Center in Boston, MA. Keynote Speakers are:
 - Michael Cembalest, Chairman of Market and Investment Strategy, J.P. Morgan Asset Management
 - Dr. Dambisa Moyo, Global Economist and Author

Register at www.NEPC.com

NEPC Client Recognitions

We are excited to announce that three of NEPC's clients were nominated for the 2016 "Chief Investment Officer of the Year" Investor Intelligence Award. The winners will be announced at Institutional Investor's annual Roundtable for Public Funds, taking place April 27-29, 2016 in Los Angeles, CA. We wish them luck!

- Arn Andrews, CIO, City of San Jose Department of Retirement Services
- Ryan Parham, CIO, Arizona Public Safety Personnel Retirement Systems
- Girard Miller, CIO, Orange County Employees Retirement System



NEPC Client Recognitions (continued)

A number of NEPC clients were named on TrustedInsight's list of Top 30 Pension Fund Chief Investment Officers. According to the January 2016 issue, "these 30 chief investment officers manage more than \$1.3 trillion in assets for millions of retirees in the United States. These professionals are at the forefront of an industry that's slow to evolve, under constant scrutiny and vital to the wellbeing of many average Americans. Nonetheless, they operate at the top of their field to prudently protect the benefits of their constituency."

NEPC clients that made the list include:

- Scott Evans, CIO, New York Employees Retirement System - \$78.5B AUM
- David Villa, CIO, State of Wisconsin Investment Board - \$102B AUM
- Gary Dokes, CIO, Arizona State Retirement System - \$31B AUM
- Michael Trotsky, Executive Director, CIO, Massachusetts PRIM Board - \$62B AUM
- Robert Beale, CIO, Louisiana State Employees' Retirement System - \$5.2B AUM
- Richard Shafer, CIO, Ohio Public Employees' Retirement System - \$91.5B AUM
- James Perry, CIO, Dallas Police and Fire Pension System - \$3B AUM
- William Coaker, CIO, San Francisco Employees Retirement System - \$20.3B AUM
- Bob Jacksha, CIO, New Mexico Education Retirement Fund - \$11B AUM
- Girard Miller, CIO, Orange County Employees Retirement System - \$12.1B AUM
- Sam Masoudi, CFA, CAIA, CIO, Wyoming Retirement System - \$7.8B AUM



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Total Fund Performance

San Bernardino County Employees' Retirement Association

Total Fund Performance Summary (Gross)

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
Total Fund	\$7,953,015,521	-0.1%	99	-3.6%	99	-1.4%	58	4.9%	76	6.2%	57	4.5%	90
Policy Index		2.7%	1	1.0%	3	1.2%	9	4.9%	77	5.6%	79	5.3%	52
S&P 500		1.3%	30	1.5%	1	1.8%	1	11.8%	1	11.6%	1	7.0%	1
Barclays Aggregate		3.0%	1	3.7%	1	2.0%	1	2.5%	99	3.8%	98	4.9%	74
60% MSCI ACWI (Gross)/40% CITI WGBI		3.1%	1	0.6%	7	0.3%	21	4.0%	94	4.1%	97	4.8%	76
InvestorForce Public DB > \$1B Gross Median		0.9%		-1.8%		-1.3%		6.1%		6.4%		5.3%	

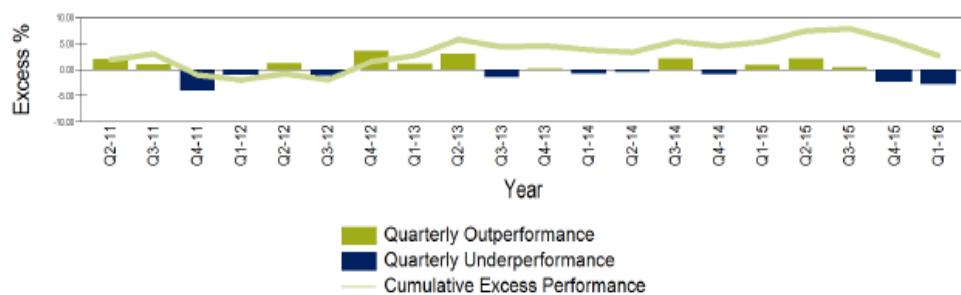
In the year ended March 31, 2016 the Fund returned -1.4% ranking in the 58th percentile of Public Funds > \$1Billion. The Fund's assets totaled \$7.9 billion, a decrease of \$143.4 million from a year ago.

The Fund experienced a net investment loss of \$134.5 million in the year ended March 31, 2016 including a net investment loss of \$9.6 million in the first calendar quarter.

In the three –year period ended March 31, 2016 the Fund returned 4.9% and ranked in the 76th percentile among its peers. The Sharpe Ratio over this period of 1.3 ranks in the 2nd percentile, indicating that the Fund earned a much higher rate of return for each incremental unit of risk taken during the period versus its peers.

In the five-year period ended March 31, 2016 the Fund returned 6.2% per annum and ranked in the 57th percentile among its peers. On a risk adjusted basis the Fund's Sharpe and Sortino Ratios rank in the 1st and 7th percentile indicating both strong returns per unit of risk taken and strong returns per unit of downside risk experienced when compared to a universe of public fund peers >\$1B.

Quarterly and Cumulative Gross Performance vs. Policy



Statistics Summary

3 Years Ending March 31, 2016

	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	1.3	2	2.3	8
InvestorForce Public DB > \$1B Gross Median	0.8	--	1.5	--

5 Years Ending March 31, 2016

	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	1.3	1	1.8	7
InvestorForce Public DB > \$1B Gross Median	0.8	--	1.3	--

Note: Universe data is preliminary and includes 31 plans with \$188.6 billion in assets.

San Bernardino County Employees' Retirement Association

Total Fund Performance Summary

Statistics Summary

1 Year Ending March 31, 2016

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	-1.4%	58	4.9%	5	-0.3	92	-0.6	99
InvestorForce Public DB > \$1B Gross Median	-1.3%	--	8.5%	--	-0.2	--	-0.3	--

Statistics Summary

3 Years Ending March 31, 2016

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	4.9%	76	3.7%	1	1.3	2	2.3	8
InvestorForce Public DB > \$1B Gross Median	6.1%	--	7.0%	--	0.8	--	1.5	--

Statistics Summary

5 Years Ending March 31, 2016

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	6.2%	57	4.6%	1	1.3	1	1.8	7
InvestorForce Public DB > \$1B Gross Median	6.4%	--	7.6%	--	0.8	--	1.3	--

Sortino Ratio requires at least two negative points during the time period in order to calculate



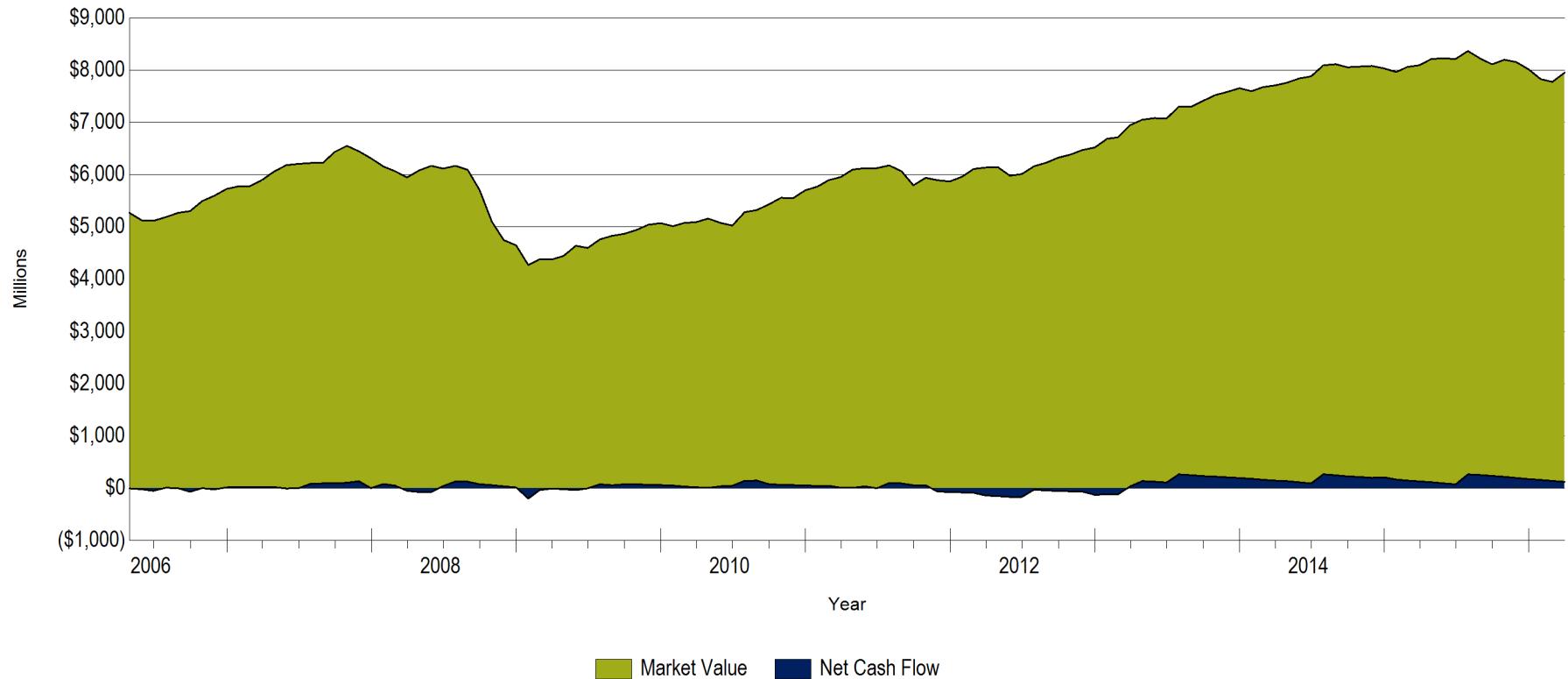
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March 31, 2016

San Bernardino County Employees' Retirement Association

Total Fund Asset Growth Summary

10 Years Ending March 31, 2016



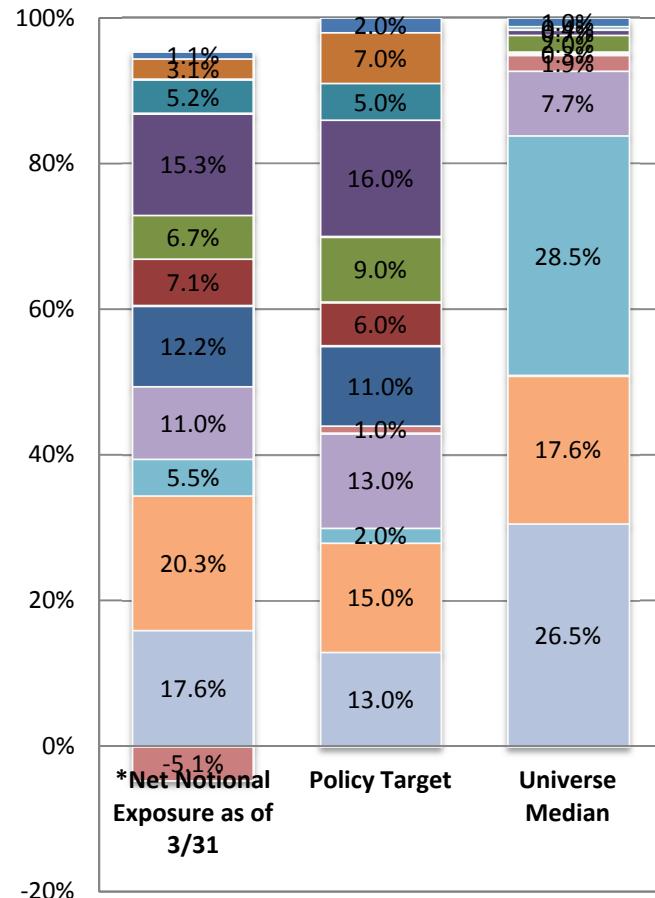
Sources of Portfolio Growth	Last Three Months	One Year	Five Years	Ten Years
Beginning Market Value	\$8,016,829,561	\$8,096,374,359	\$5,956,547,092	\$5,181,862,494
Net Additions/Withdrawals	-\$54,215,579	-\$8,848,631	\$112,585,845	\$121,731,074
Investment Earnings	-\$9,598,462	-\$134,510,208	\$1,883,882,584	\$2,649,421,953
Ending Market Value	\$7,953,015,521	\$7,953,015,521	\$7,953,015,521	\$7,953,015,521



NEPC, LLC

March 31, 2016

Total Fund Asset Allocation vs. Policy Targets



	*Net Notional Exposure	*Net Notional Exposure as of 3/31	Policy Target	*Difference	Policy Ranges	Within Range
US Equities	1,375,905	17.3%	13.0%	4.3%	8%-18%	Yes
Int'l Equities	1,619,954	20.4%	15.0%	5.4%	10%-20%	No
U.S. Core	440,881	5.5%	2.0%	3.5%	-3%-7%	Yes
US Credit	879,091	11.1%	13.0%	-1.9%	8%-18%	Yes
Non-US Core Fixed Income	(403,969)	-5.1%	1.0%	-6.1%	-4%-6%	No
Non-US Credit	972,856	12.2%	11.0%	1.2%	6%-16%	Yes
Emerging Market Debt	563,960	7.1%	6.0%	1.1%	1%-11%	Yes
Real Estate	531,333	6.7%	9.0%	-2.3%	4%-14%	Yes
Private Equity	1,222,778	15.4%	16.0%	-0.6%	11%-21%	Yes
Real Assets	411,997	5.2%	5.0%	0.2%	0%-10%	Yes
Absolute Return	250,061	3.1%	7.0%	-3.9%	2%-12%	Yes
Cash	88,169	1.1%	2.0%	-0.9%	0%-10%	Yes
	7,953,016	100.0%	100.0%			

*Net Notional Exposure is the combination of physical exposures as reported by State Street and the synthetic exposures reported by Russell.
Universe Medians are a quarter lagged due to availability



NEPC, LLC

December 31, 2015

San Bernardino County Employees' Retirement Association

SBCERA Delta Adjusted Asset Summary

Asset Class	Physical Exposure		Delta Adjusted Synthetic Exposure		Net Position		Overlay Target		Tactical Policy Target	
	Total Market Value	7,889.2	100.0%	0.0	0.0%	7,889.2	100.0%	7,889.2	100.0%	7,889.2
Cash	1,500.0	19.01%	-1,479.2	-18.75%	20.8	0.26%	0.0	0.0%	0.0	0.00%
Cash	1,500.0	19.01%	-1,479.2	-18.75%	20.8	0.26%	0.0	0.0%	0.0	0.00%
Equity	1,229.2	15.58%	1,763.7	22.36%	2,992.8	37.94%	2,998.5	38.01%	2,997.9	38.00%
Emerging Markets	223.9	2.84%	395.6	5.01%	619.5	7.85%	631.3	8.0%	631.1	8.00%
Equity Delta Hedge	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.00%
International Developed	167.9	2.13%	800.2	10.14%	968.1	12.27%	946.9	12.0%	946.7	12.00%
US Large Cap	837.3	10.61%	283.2	3.59%	1,120.5	14.2%	1,144.2	14.5%	1,143.9	14.50%
US Small Cap	0.1	0.0%	284.7	3.61%	284.7	3.61%	276.2	3.5%	276.1	3.50%
Fixed	2,557.7	32.42%	-284.5	-3.61%	2,273.2	28.81%	2,288.3	29.01%	2,287.9	29.00%
EM High Yield CDX	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.00%
Global ex US Fixed Income	1,656.1	20.99%	-517.8	-6.56%	1,138.3	14.43%	1,144.2	14.5%	1,143.9	14.50%
High Yield**	901.6	11.43%	0.0	0.0%	901.6	11.43%	729.9	9.25%	729.8	9.25%
US Fixed Income	0.0	0.0%	233.3	2.96%	233.3	2.96%	414.3	5.25%	414.2	5.25%
Other	2,602.4	32.99%	0.0	0.0%	2,602.4	32.99%	2,602.4	32.99%	2,603.4	33.00%
Alternatives	195.1	2.47%	0.0	0.0%	195.1	2.47%	195.1	2.47%	197.2	2.50%
Commodities	137.1	1.74%	0.0	0.0%	137.1	1.74%	137.1	1.74%	149.9	1.90%
Infrastructure	65.2	0.83%	0.0	0.0%	65.2	0.83%	65.2	0.83%	63.1	0.80%
Private Equity	1,203.7	15.26%	0.0	0.0%	1,203.7	15.26%	1,203.7	15.26%	1,262.3	16.00%
Real Estate	559.9	7.1%	0.0	0.0%	559.9	7.1%	559.9	7.1%	489.1	6.20%
Tactical Cash	441.4	5.6%	0.0	0.0%	441.4	5.6%	441.4	5.6%	441.8	5.60%

Source: Russell Investments



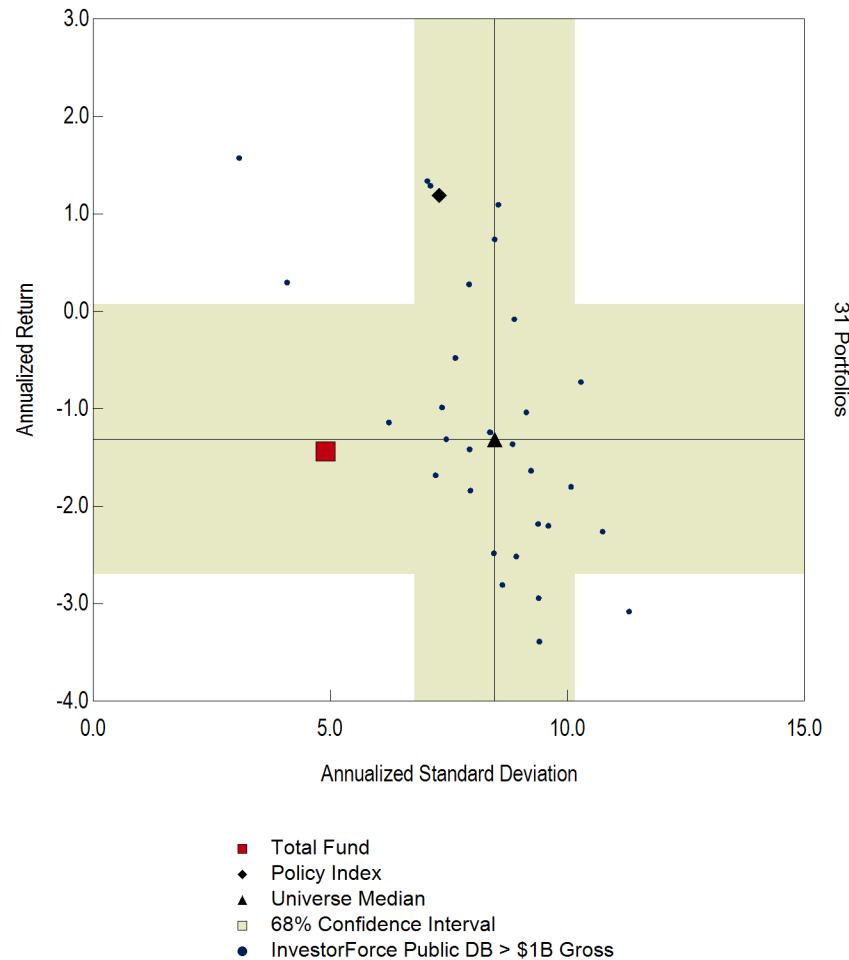
NEPC, LLC

December 31, 2015

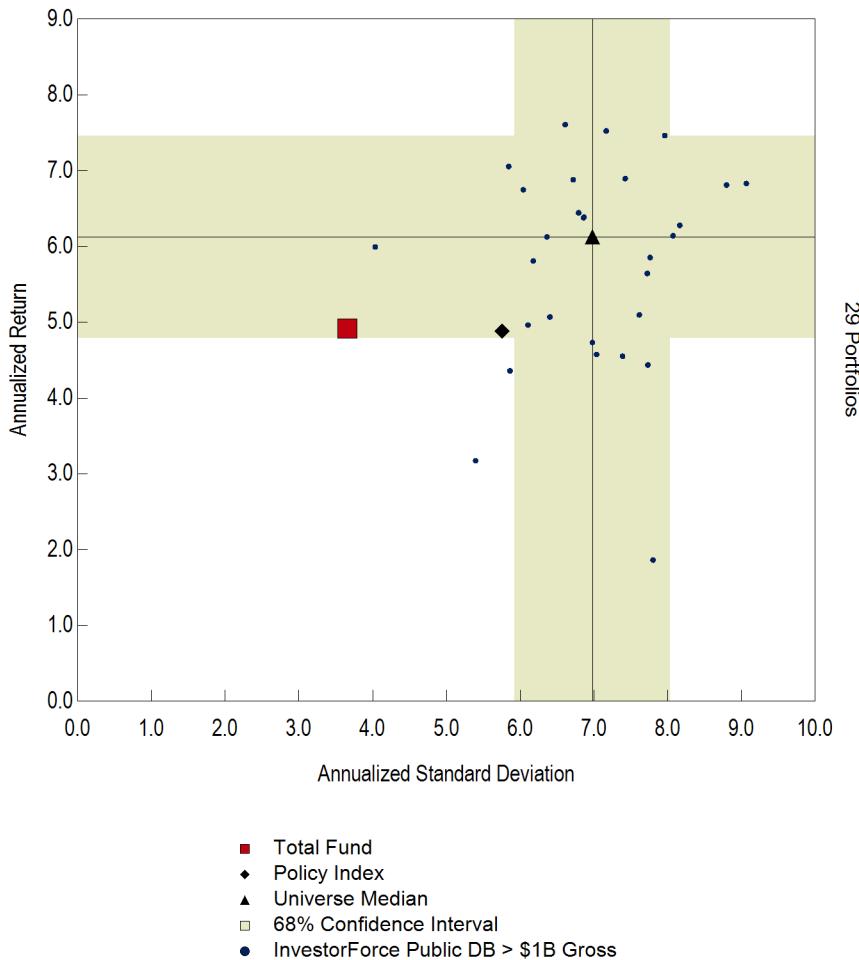
San Bernardino County Employees' Retirement Association

Total Fund Risk/Return

1 Year Ending March 31, 2016



3 Years Ending March 31, 2016



NEPC, LLC

March 31, 2016

San Bernardino County Employees' Retirement Association

Total Fund Risk Statistics vs. Peer Universe

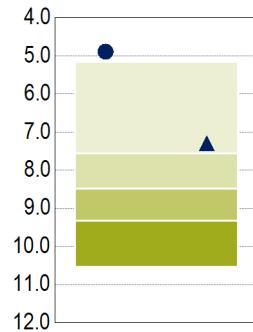
Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)

1 Year

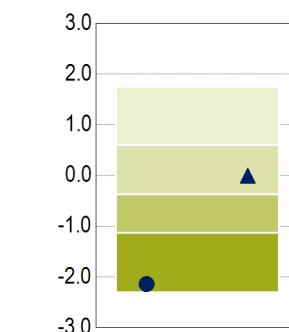
Anlzd Return



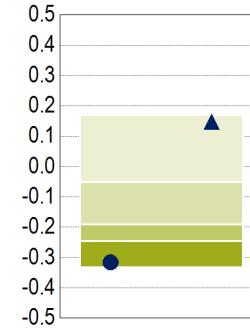
Anlzd Standard Deviation



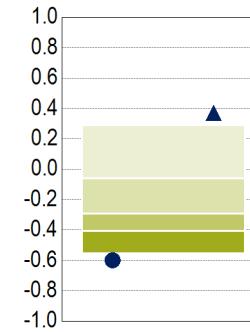
Anlzd Alpha



Sharpe Ratio



Sortino Ratio



Sortino Ratio requires at least two negative points during the time period in order to calculate
Sample size is 31 Portfolios



NEPC, LLC

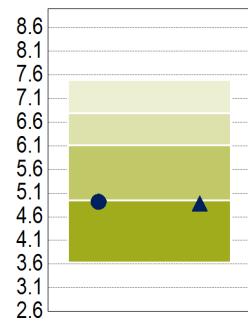
March 31, 2016

San Bernardino County Employees' Retirement Association

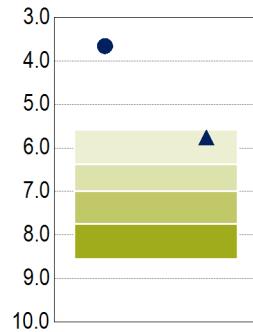
Total Fund Risk Statistics vs. Peer Universe

Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)
3 Years

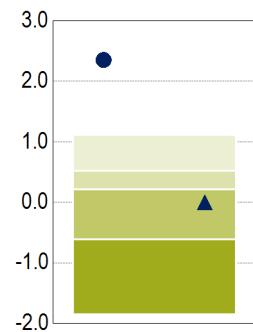
Anlzd Return



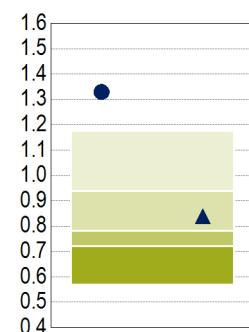
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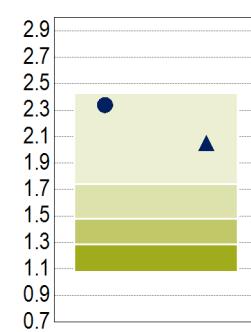
Anlzd Alpha



Sharpe Ratio



Sortino Ratio



Sortino Ratio requires at least two negative points during the time period in order to calculate
Sample size is 31 Portfolios



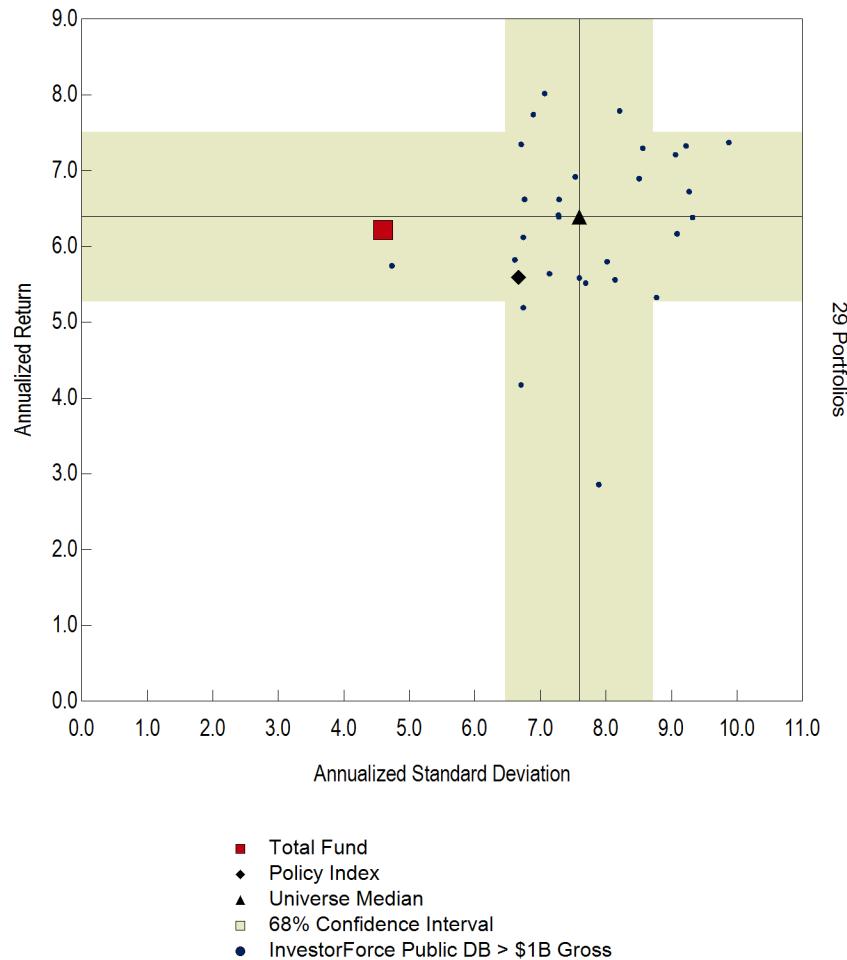
NEPC, LLC

March 31, 2016

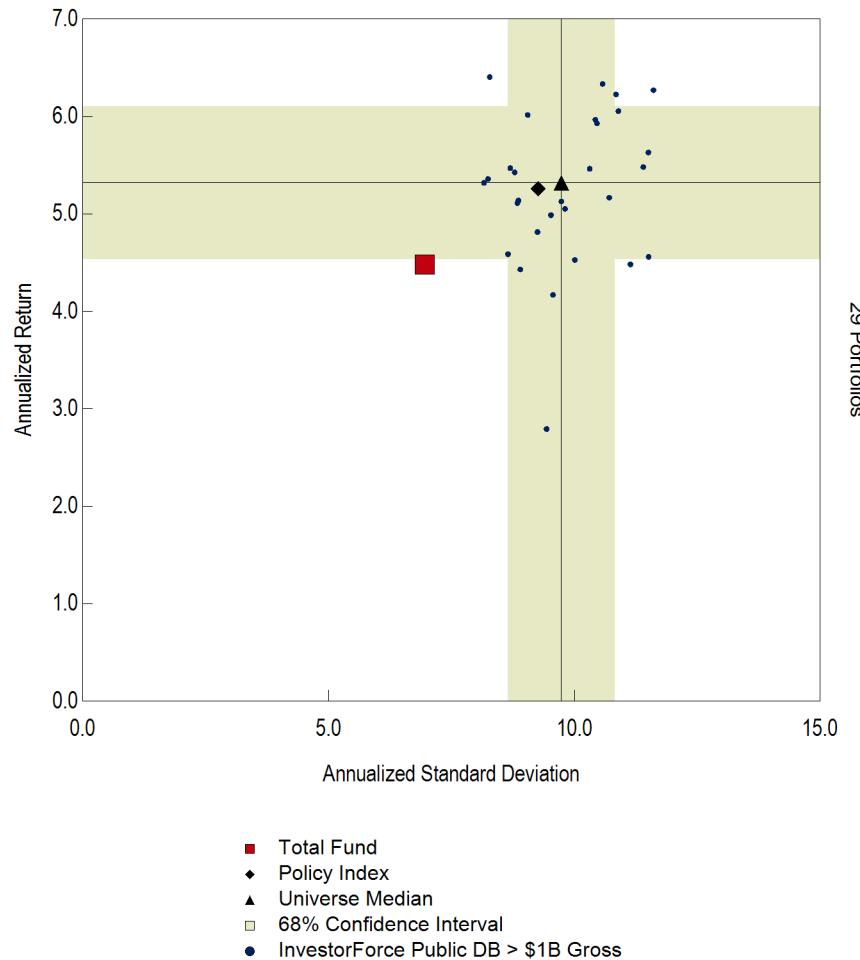
San Bernardino County Employees' Retirement Association

Total Fund Risk/Return

5 Years Ending March 31, 2016



10 Years Ending March 31, 2016



NEPC, LLC

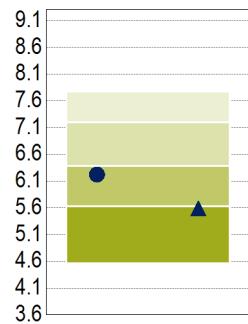
March 31, 2016

San Bernardino County Employees' Retirement Association

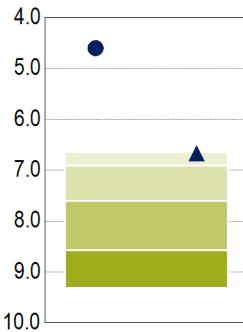
Total Fund Risk Statistics vs. Peer Universe

**Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)
5 Years**

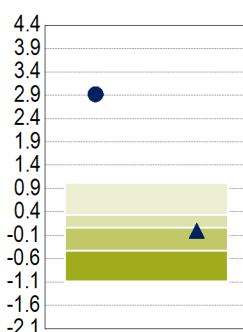
Anlzd Return



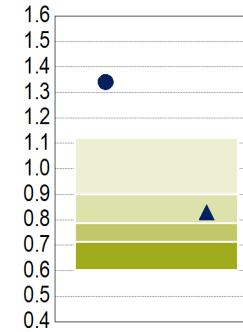
Anlzd Standard Deviation



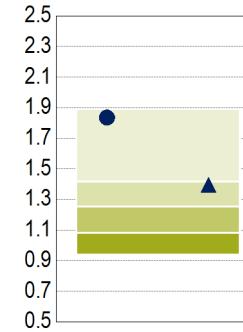
Anlzd Alpha



Sharpe Ratio



Sortino Ratio



● Total Fund
Value 6.2
%tile 57

▲ Policy Index
Value 5.6
%tile 79

Universe
5th %tile 7.8
25th %tile 7.2
Median 6.4
75th %tile 5.6
95th %tile 4.6

● Total Fund
Value 4.6
%tile 1

▲ Policy Index
Value 6.7
%tile 6

Universe
5th %tile 6.6
25th %tile 6.9
Median 7.6
75th %tile 8.6
95th %tile 9.3

● Total Fund
Value 2.9
%tile 1

▲ Policy Index
Value 0.0
%tile 54

Universe
5th %tile 1.0
25th %tile 0.3
Median 0.1
75th %tile -0.4
95th %tile -1.1

● Total Fund
Value 1.3
%tile 1

▲ Policy Index
Value 0.8
%tile 45

Universe
5th %tile 1.1
25th %tile 0.9
Median 0.8
75th %tile 0.7
95th %tile 0.6

● Total Fund
Value 1.8
%tile 7

▲ Policy Index
Value 1.4
%tile 37

Universe
5th %tile 1.9
25th %tile 1.4
Median 1.3
75th %tile 1.1
95th %tile 0.9

Sortino Ratio requires at least two negative points during the time period in order to calculate
Sample size is 31 Portfolios



NEPC, LLC

March 31, 2016

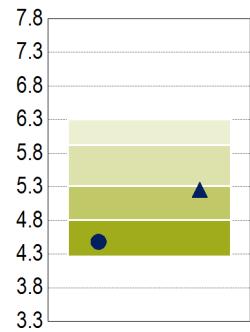
San Bernardino County Employees' Retirement Association

Total Fund Risk Statistics vs. Peer Universe

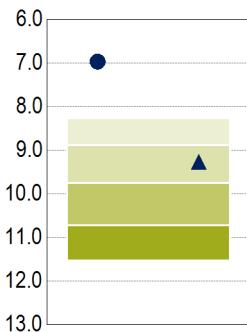
Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)

10 Years

Anlzd Return



Anlzd Standard Deviation



Anlzd Alpha



Sharpe Ratio



Sortino Ratio



Sortino Ratio requires at least two negative points during the time period in order to calculate
Sample size is 31 Portfolios



NEPC, LLC

March 31, 2016

San Bernardino County Employees' Retirement Association

Total Fund Risk Statistics

	3 Years Ending March 31, 2016									
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sortino Ratio	Rank	Info Ratio	Rank	
Total Fund	100.0%	4.9%	76	3.7%	1	2.3	8	0.0	67	
Policy Index	--	4.9%	77	5.8%	7	2.1	12	--	--	
Domestic Equity	10.2%	-0.4%	99	4.9%	1	-0.1	99	-0.8	85	
Russell 3000	--	11.1%	28	11.6%	48	1.8	36	--	--	
International Developed	2.5%	7.5%	1	23.9%	99	0.4	11	0.3	28	
MSCI EAFE	--	2.2%	34	13.6%	88	0.3	31	--	--	
International Emerging	2.8%	-6.4%	--	13.6%	--	-0.8	--	-0.3	--	
MSCI Emerging Markets	--	-4.5%	--	16.7%	--	-0.5	--	--	--	
U.S. Credit Strategies	11.8%	4.3%	11	2.8%	1	2.7	1	0.5	12	
50% Credit Suisse Leveraged Loan Index / 50% BofA ML US HY BB-B Rated Constrained Index	--	2.4%	53	3.8%	14	1.2	22	--	--	
Non-U.S. Credit Composite	13.6%	4.6%	--	3.2%	--	3.2	--	0.3	--	
BofA Merrill Lynch Euro High Yield Constrained	--	1.3%	--	10.8%	--	0.2	--	--	--	
Non-U.S. Core Composite	1.0%	-0.6%	88	8.3%	86	-0.1	86	-0.3	83	
Barclays Global Aggregate	--	0.9%	67	4.4%	38	0.3	66	--	--	
Emerging Markets Debt Composite	7.1%	-0.1%	55	6.4%	21	0.0	54	0.3	58	
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	--	-1.7%	64	9.1%	68	-0.3	63	--	--	
Alpha Pool Composite	18.8%	1.2%	80	3.0%	9	0.5	78	-0.6	80	
91 Day T-Bill + 3%	--	3.1%	27	0.0%	1	--	--	--	--	

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank
Private Equity Composite	15.4%	14.7%	--	4.3%	--	3.4	--
Cambridge Associates Global All PE (Qtr Lag)	--	12.3%	--	6.8%	--	1.8	--
Real Estate Composite	6.7%	11.5%	81	3.6%	46	3.1	66
NCREIF Property Index 1 Qtr Lag	--	12.0%	78	4.8%	60	2.5	--
Real Assets Composite	5.2%	-0.6%	71	5.2%	42	-0.1	65
Bloomberg Commodity Index	--	-16.8%	93	12.7%	92	-1.3	99

Percent of Total equals 95% because Beta Overlay is not included as these statistics are not relevant for alternative asset classes.



NEPC, LLC

March 31, 2016

San Bernardino County Employees' Retirement Association

Total Fund Risk Statistics

	5 Years Ending March 31, 2016									
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sortino Ratio	Rank	Info Ratio	Rank	
Total Fund	100.0%	6.2%	57	4.6%	1	1.8	7	0.2	50	
Policy Index	--	5.6%	79	6.7%	6	1.4	37	--	--	
Domestic Equity	10.2%	1.5%	99	6.5%	1	0.3	99	-0.7	83	
Russell 3000	--	11.0%	15	12.7%	19	1.5	19	--	--	
International Developed	2.5%	11.9%	1	24.7%	99	0.7	1	0.6	27	
MSCI EAFE	--	2.3%	69	15.5%	74	0.2	43	--	--	
International Emerging	2.8%	-4.0%	--	16.5%	--	-0.4	--	0.0	--	
MSCI Emerging Markets	--	-4.1%	--	18.8%	--	-0.3	--	--	--	
U.S. Credit Strategies	11.8%	5.1%	21	4.3%	24	1.3	40	0.1	28	
50% Credit Suisse Leveraged Loan Index / 50% BofA ML US HY BB-B Rated Constrained Index	--	4.3%	40	4.3%	26	1.5	34	--	--	
Non-U.S. Credit Composite	13.6%	4.0%	--	6.0%	--	0.7	--	0.1	--	
BofA Merrill Lynch Euro High Yield Constrained	--	2.6%	--	14.4%	--	0.3	--	--	--	
Non-U.S. Core Composite	1.0%	0.9%	86	10.1%	90	0.1	90	-0.1	82	
Barclays Global Aggregate	--	1.8%	75	4.4%	28	0.6	65	--	--	
Emerging Markets Debt Composite	7.1%	1.4%	65	7.9%	35	0.2	65	-0.2	64	
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	--	2.1%	63	9.3%	62	0.3	62	--	--	
Alpha Pool Composite	18.8%	4.0%	13	3.0%	3	1.6	7	0.3	73	
91 Day T-Bill + 3%	--	3.1%	47	0.0%	1	--	--	--	--	

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank
Private Equity Composite	15.4%	12.6%	--	5.2%	--	2.4	--
Cambridge Associates Global All PE (Qtr Lag)	--	11.6%	--	7.4%	--	1.5	--
Real Estate Composite	6.7%	11.2%	87	4.2%	22	2.7	50
NCREIF Property Index 1 Qtr Lag	--	12.2%	75	4.9%	35	2.5	--
Real Assets Composite	5.2%	1.9%	85	5.3%	57	0.3	80
Bloomberg Commodity Index	--	-14.1%	99	14.6%	99	-1.0	99

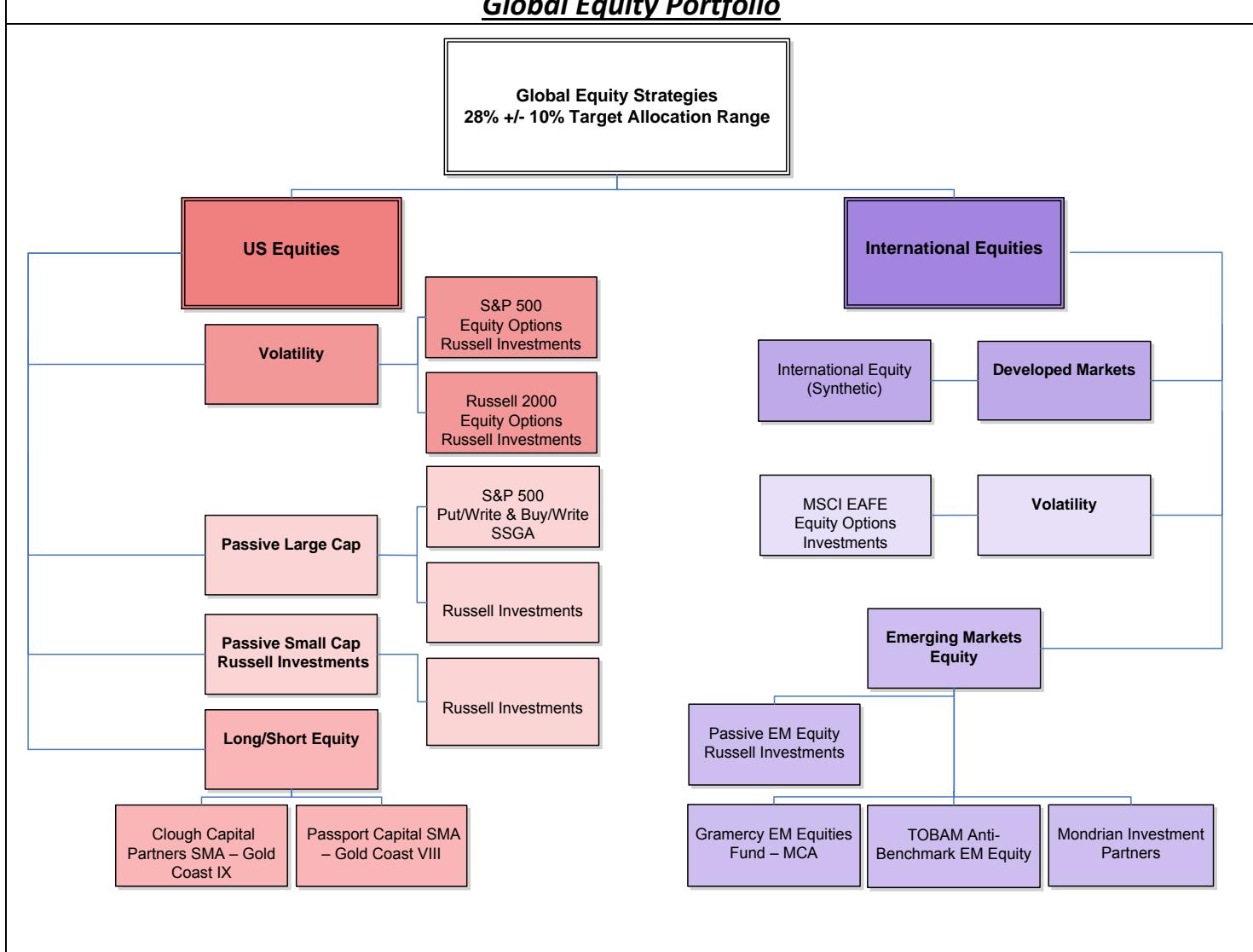
Percent of Total equals 95% because Beta Overlay is not included as these statistics are not relevant for alternative asset classes.



NEPC, LLC

March 31, 2016

Global Equity Portfolio



San Bernardino County Employees' Retirement Association
 Global Equity Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Beta Overlay	334,988,086	4.2	-20.7	99	-45.0	99	-45.2	99	4.7	20	16.6	1	--	--
eA All Global Balanced / TAA Gross Median			1.7		-2.8		-3.6		2.4		3.7		5.1	
Total Equity	1,233,775,259	15.5	5.1	1	-2.4	37	-1.2	19	0.0	99	2.2	99	--	--
MSCI ACWI			0.2	60	-4.7	60	-4.3	67	5.5	89	5.2	98	4.1	93
Excess Return			4.9		2.3		3.1		-5.5		-3.0			
InvestorForce Public DB Total Eq Gross Median			0.5		-4.4		-3.5		8.0		7.2		5.1	
Domestic Equity	810,133,130	10.2	1.4	32	1.2	12	1.5	9	-0.4	99	1.5	99	-0.2	99
Russell 3000			1.0	49	-0.5	29	-0.3	29	11.1	28	11.0	15	6.9	38
Excess Return			0.4		1.7		1.8		-11.5		-9.5		-7.1	
InvestorForce Public DB US Eq Gross Median			0.9		-1.9		-1.6		10.8		10.3		6.8	
Large Cap Equity	636,574,565	8.0	3.9	13	3.8	8	4.3	6	0.3	99	3.3	98	0.7	99
S&P 500			1.3	37	1.5	16	1.8	16	11.8	28	11.6	27	7.0	59
Excess Return			2.6		2.3		2.5		-11.5		-8.3		-6.3	
eA All US Equity Gross Median			0.4		-3.6		-3.4		10.4		10.2		7.3	
SsgA S&P500	582,573,787	7.3	-0.7	64	0.2	23	2.6	12	5.9	91	6.3	92	2.9	99
S&P 500			1.3	37	1.5	16	1.8	16	11.8	28	11.6	27	7.0	59
Excess Return			-2.0		-1.3		0.8		-5.9		-5.3		-4.1	
eA All US Equity Gross Median			0.4		-3.6		-3.4		10.4		10.2		7.3	
Russell US Large Cap Volatility	54,000,778	0.7	42.7	1	30.4	1	-6.8	73	-47.2	99	-30.3	99	--	--
S&P 500			1.3	37	1.5	16	1.8	16	11.8	28	11.6	27	7.0	59
Excess Return			41.4		28.9		-8.6		-59.0		-41.9			
eA All US Equity Gross Median			0.4		-3.6		-3.4		10.4		10.2		7.3	



NEPC, LLC

March 31, 2016

San Bernardino County Employees' Retirement Association

Global Equity Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Small Cap Equity	94,128	0.0	0.1	50	86.7	1	17.4	1	-51.9	99	-32.2	99	--	--
Russell 2000			-1.5	64	-10.1	68	-9.8	70	6.8	74	7.2	75	5.3	84
Excess Return			1.6		96.8		27.2		-58.7		-39.4			
eA US Small Cap Equity Gross Median			0.0		-7.4		-6.8		8.6		8.9		6.7	
Russell US Small Cap Volatility	94,128	0.0	0.1	55	86.7	1	17.4	1	-51.9	99	-32.2	99	--	--
Russell 2000			-1.5	73	-10.1	85	-9.8	86	6.8	86	7.2	87	5.3	90
Excess Return			1.6		96.8		27.2		-58.7		-39.4			
eA All US Equity Gross Median			0.4		-3.6		-3.4		10.4		10.2		7.3	
LongShort Equity	173,464,437	2.2	-5.7	99	-10.0	99	-7.5	98	1.8	99	-0.1	99	--	--
Credit Suisse Long Shrt Eqt USD			-3.8	99	-3.8	78	-2.2	64	5.6	99	3.9	99	4.7	99
Excess Return			-1.9		-6.2		-5.3		-3.8		-4.0			
InvestorForce Public DB US Eq Gross Median			0.9		-1.9		-1.6		10.8		10.3		6.8	
Clough	77,908,858	1.0	-10.4	99	-12.6	91	-11.5	91	0.1	99	0.0	99	--	--
Passport	95,547,678	1.2	2.6	23	2.1	13	8.8	1	7.4	82	6.6	90	--	--
Select Equity	7,901	0.0	-12.4	99	-23.2	99	-23.1	99	-4.5	99	1.1	99	--	--
Credit Suisse Long Shrt Eqt USD			-3.8	88	-3.8	52	-2.2	43	5.6	92	3.9	97	4.7	94
Excess Return (vs. Gross)			-8.6		-19.4		-20.9		-10.1		-2.8			
eA All US Equity Gross Median			0.4		-3.6		-3.4		10.4		10.2		7.3	



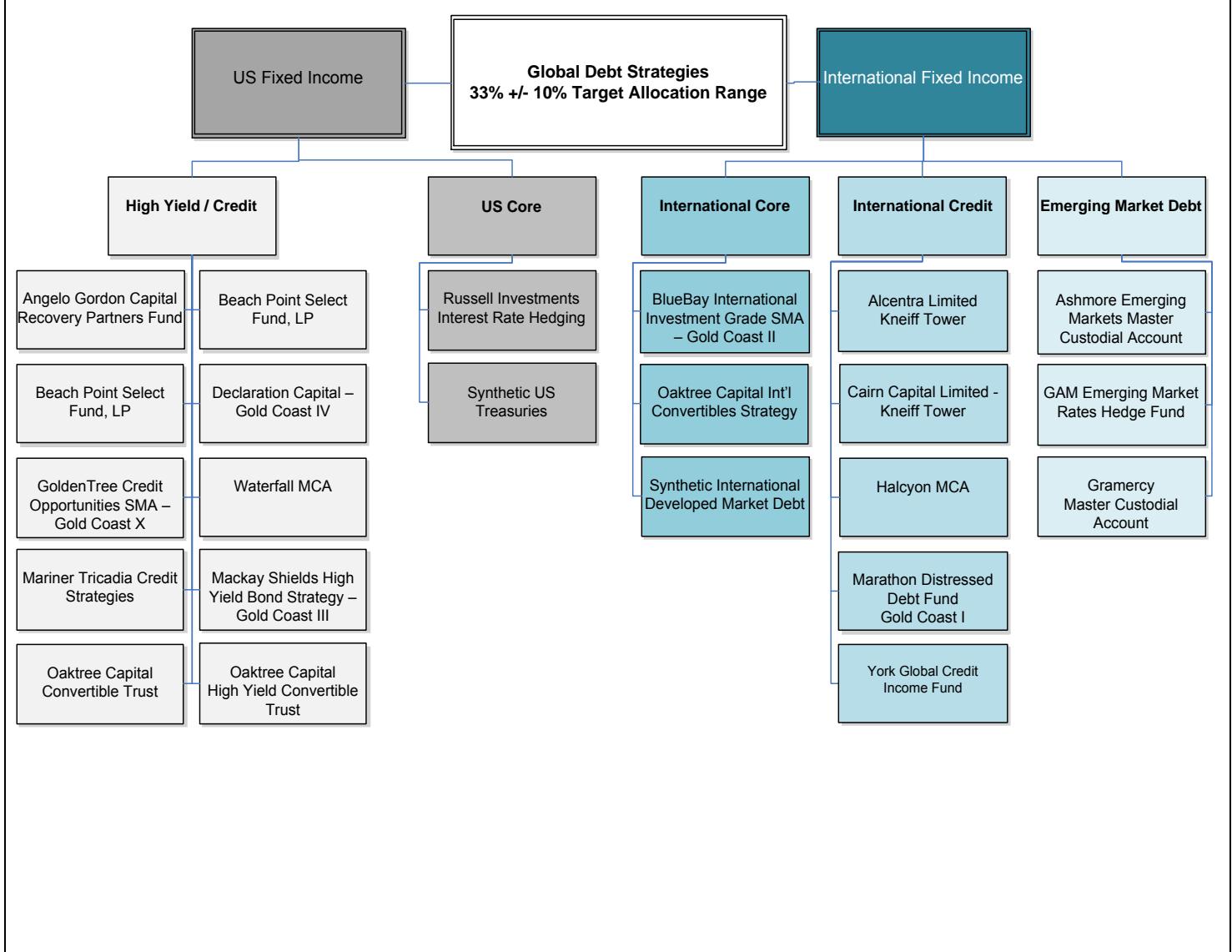
NEPC, LLC

March 31, 2016

San Bernardino County Employees' Retirement Association
 Global Equity Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Equity	423,642,129	5.3	12.0	1	-11.4	99	-8.9	84	-0.7	94	2.3	54	3.0	30
MSCI EAFE			-3.0	99	-8.8	75	-8.3	78	2.2	77	2.3	53	1.8	96
Excess Return			15.0		-2.6		-0.6		-2.9		0.0		1.2	
InvestorForce Public DB Gbl Eq Gross Median			0.0		-4.8		-4.5		7.9		2.7		2.3	
International Developed	197,712,192	2.5	25.2	1	-10.2	38	-3.7	8	7.5	1	11.9	1	5.5	1
MSCI EAFE			-3.0	77	-8.8	26	-8.3	30	2.2	34	2.3	69	1.8	91
Excess Return			28.2		-1.4		4.6		5.3		9.6		3.7	
InvestorForce Public DB Dev Mkt ex-US Eq Gross Median			-1.1		-10.7		-10.0		1.6		2.6		2.9	
Russell International Volatility	197,712,179	2.5	25.2	1	-10.2	86	-3.7	41	7.5	16	11.1	1	--	--
MSCI EAFE			-3.0	73	-8.8	76	-8.3	82	2.2	83	2.3	84	1.8	90
Excess Return			28.2		-1.4		4.6		5.3		8.8			
eA All EAFE Equity Gross Median			-1.8		-6.5		-4.9		4.1		4.3		3.5	
International Emerging	225,929,937	2.8	1.9	--	-12.2	--	-12.8	--	-6.4	--	-4.0	--	3.4	--
MSCI Emerging Markets			5.7	--	-12.6	--	-12.0	--	-4.5	--	-4.1	--	3.0	--
Excess Return			-3.8		0.4		-0.8		-1.9		0.1		0.4	
InvestorForce Public DB Emg Mkt Eq Gross Median			--		--		--		--		--		--	
Mondrian	117,252,074	1.5	7.0	21	-9.3	32	-10.0	49	-6.0	93	-1.5	39	5.0	43
MSCI Emerging Markets			5.7	35	-12.6	69	-12.0	77	-4.5	77	-4.1	82	3.0	81
Excess Return			1.3		3.3		2.0		-1.5		2.6		2.0	
eA Emg Mkts Equity Gross Median			4.4		-10.9		-10.2		-3.2		-2.2		4.4	
Gramercy Emerging Market Equity	58,578,695	0.7	-1.0	97	-11.6	59	-11.5	66	--	--	--	--	--	--
MSCI Emerging Markets			5.7	35	-12.6	69	-12.0	77	-4.5	77	-4.1	82	3.0	81
Excess Return			-6.7		1.0		0.5							
eA Emg Mkts Equity Gross Median			4.4		-10.9		-10.2		-3.2		-2.2		4.4	
Tobam	50,000,000	0.6	--	--	--	--	--	--	--	--	--	--	--	--

Global Debt Strategies



San Bernardino County Employees' Retirement Association

Global Debt Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Fixed	2,582,682,190	32.5	-0.8	99	-1.7	99	0.9	58	3.8	2	4.1	31	--	--
InvestorForce Public DB Total Fix Inc Gross Median			2.5		2.5		1.4		1.9		3.9		5.5	
U.S. Credit Strategies	937,009,512	11.8	-1.9	99	-4.5	94	-1.7	92	4.3	11	5.1	21	8.3	1
50% Credit Suisse Leveraged Loan Index / 50% BofA ML US HY BB-B Rated Constrained Index			2.2	81	-2.1	92	-1.7	92	2.4	53	4.3	40	5.3	38
Excess Return			-4.1		-2.4		0.0		1.9		0.8		3.0	
BofA Merrill Lynch US High Yield Master II TR			3.2	68	-3.9	94	-4.0	99	1.8	73	4.7	29	6.8	1
eA Global Credit Fixed Income Gross Median			4.1		3.3		1.4		2.4		4.0		4.1	
AG Capital	4,218,876	0.1	-0.5	98	-5.6	99	-7.0	99	3.4	27	5.4	15	--	--
Golden Tree Asset Management	322,990,918	4.1	-0.6	98	-4.5	94	-1.3	91	9.1	1	6.6	2	--	--
Beach Point Capital (Formerly Post)	117,454,768	1.5	-3.5	99	-4.5	94	0.0	84	6.0	3	6.6	2	--	--
Golden Tree Distressed Debt	29,720,690	0.4	-2.5	99	0.8	80	8.9	1	18.8	1	14.6	1	--	--
Mackay / Gold Coast	86,529,128	1.1	-2.8	99	-8.4	99	-7.5	99	1.3	81	4.3	41	7.2	1
Mariner Tricadia	74,597,259	0.9	-3.9	99	-6.1	99	-5.1	99	2.4	53	3.5	63	--	--
MD SASS Waterfall Victoria	27,814,316	0.3	-1.6	--	--	--	--	--	--	--	--	--	--	--
OCM Convertible	14,820,119	0.2	-7.5	99	-14.4	99	-11.3	99	2.5	44	2.7	78	--	--
OCM High Income	14,208,717	0.2	-4.9	99	-6.5	99	-4.3	99	3.4	26	1.8	93	--	--
Russell Interest Rate Hedging	21,997,785	0.3	-18.9	99	-36.4	99	-26.6	99	-28.6	99	-30.2	99	--	--
Stone Tower Credit (Apollo)	70,334,855	0.9	-1.7	96	-2.1	84	-1.3	78	3.1	20	--	--	--	--
Sutherland REIT Holdings	86,356,328	1.1	-1.0	--	0.6	--	--	--	--	--	--	--	--	--
Waterfall Asset Management	27,481,612	0.3	16.6	--	18.5	--	--	--	--	--	--	--	--	--
Waterfall Victoria	38,109,902	0.5	2.2	--	6.9	--	8.7	--	--	--	--	--	--	--



NEPC, LLC

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San Bernardino County Employees' Retirement Association

Global Debt Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Non-U.S. Fixed Income Composite	1,645,672,678	20.7	-0.2	99	0.0	89	2.6	6	3.3	3	3.4	84	4.8	90
Barclays Global Aggregate			5.9	1	5.8	1	4.6	1	0.9	93	1.8	99	4.3	94
Excess Return			-6.1		-5.8		-2.0		2.4		1.6		0.5	
InvestorForce Public DB Total Fix Inc Gross Median			2.5		2.5		1.4		1.9		3.9		5.5	
Non-U.S. Credit Composite	1,081,713,133	13.6	-2.0	--	-0.3	--	2.8	--	4.6	--	4.0	--	--	--
BofA Merrill Lynch Euro High Yield Constrained			6.8	--	3.0	--	5.6	--	1.3	--	2.6	--	6.9	--
Excess Return			-8.8		-3.3		-2.8		3.3		1.4			
InvestorForce Public DB Glbl Fix Inc Gross Median			--		--		--		--		--		--	
Marathon/Gold Coast	190,217,095	2.4	-6.2	99	-4.6	95	-2.9	98	6.5	1	3.2	70	--	--
Alcentra Core European Credit	300,687,819	3.8	-0.6	98	7.5	1	15.2	1	12.8	1	--	--	--	--
Halcyon Asset Management	80,952,917	1.0	0.3	96	--	--	--	--	--	--	--	--	--	--
BofA Merrill Lynch Euro High Yield Constrained			6.8	9	3.0	60	5.6	4	1.3	81	2.6	79	6.9	1
Excess Return			-6.5						3.0					
eA Global Credit Fixed Income Gross Median			4.1		3.3		1.4		2.4		4.0		4.1	
Oaktree Capital	35,252,196	0.4	1.9	82	-0.7	85	0.3	83	1.5	79	1.0	97	--	--
York Global Credit	119,602,986	1.5	-4.0	99	-6.8	99	-4.3	99	4.3	11	--	--	--	--
BofA Merrill Lynch Euro High Yield Constrained			6.8	9	3.0	60	5.6	4	1.3	81	2.6	79	6.9	1
Excess Return			-10.8		-9.8		-9.9		3.0					
eA Global Credit Fixed Income Gross Median			4.1		3.3		1.4		2.4		4.0		4.1	
Cairn Composite	276,421,719	3.5	-3.0	99	-2.6	92	-0.8	88	-0.1	90	1.1	97	--	--
BofA Merrill Lynch Euro High Yield Constrained			6.8	9	3.0	60	5.6	4	1.3	81	2.6	79	6.9	1
Excess Return			-9.8		-5.6		-6.4		-1.4		-1.5			
eA Global Credit Fixed Income Gross Median			4.1		3.3		1.4		2.4		4.0		4.1	
Non-U.S. Core Composite	78,578,402	1.0	6.0	20	4.0	26	4.2	13	-0.6	88	0.9	86	--	--
Barclays Global Aggregate			5.9	22	5.8	11	4.6	12	0.9	67	1.8	75	4.3	84
Excess Return			0.1		-1.8		-0.4		-1.5		-0.9			
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Bluebay/Goldcoast	78,578,402	1.0	6.0	20	4.0	26	4.2	13	-0.7	88	0.9	86	--	--
Barclays Global Aggregate			5.9	22	5.8	11	4.6	12	0.9	67	1.8	75	4.3	84
Excess Return			0.1		-1.8		-0.4		-1.6		-0.9			
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	



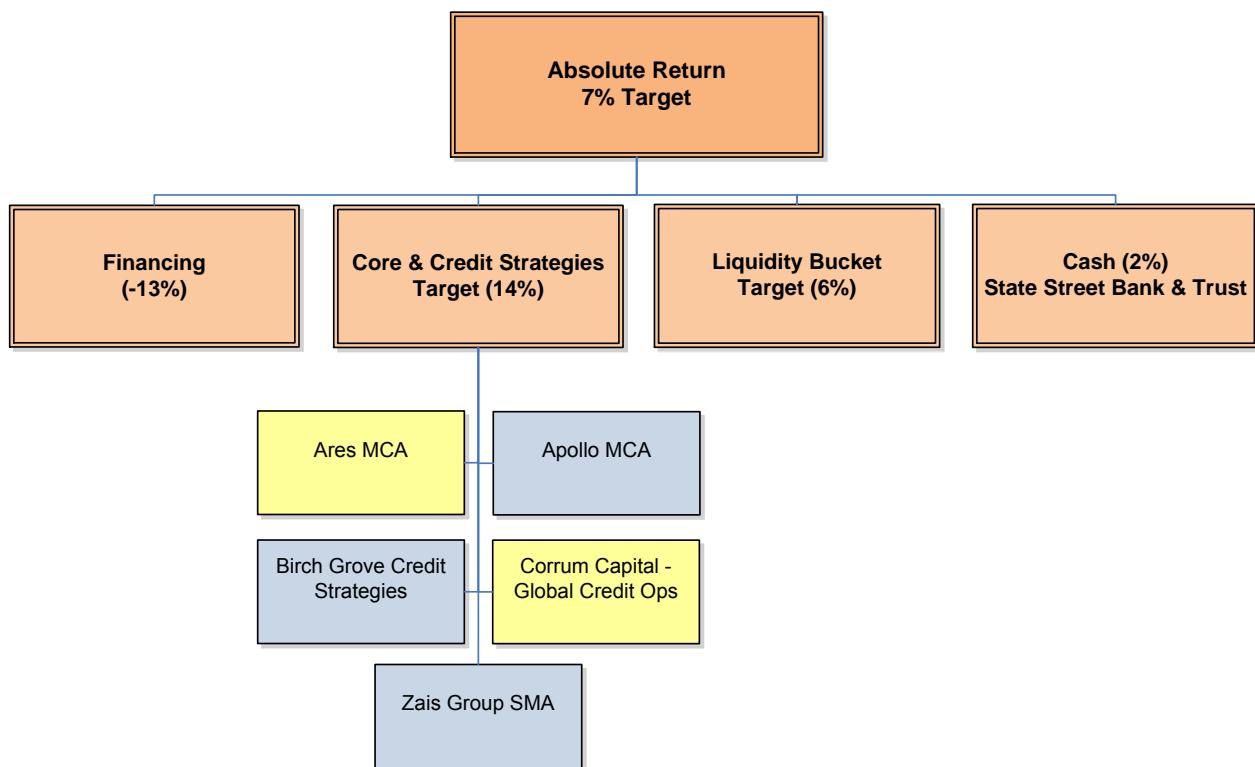
NEPC, LLC

March 31, 2016

San Bernardino County Employees' Retirement Association
Global Debt Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Emerging Markets Debt Composite	563,959,545	7.1	3.4	94	0.2	63	1.9	42	-0.1	55	1.4	65	3.7	96
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified			8.0	29	2.0	35	1.3	52	-1.7	64	2.1	63	6.2	78
Excess Return			-4.6		-1.8		0.6		1.6		-0.7		-2.5	
eA All Emg Mkts Fixed Inc Gross Median			5.4		1.1		1.4		0.3		4.0		7.3	
Ashmore Emerging Markets Liquid Investments	123,557,922	1.6	3.5	92	-2.3	88	1.4	51	-1.3	62	--	--	--	--
JP Morgan GBI - EM Global Diversified Index			11.0	6	-0.7	72	-1.6	79	-6.7	89	-2.0	89	5.0	93
Excess Return			-7.5		-1.6		3.0		5.4					
eA All Emg Mkts Fixed Inc Gross Median			5.4		1.1		1.4		0.3		4.0		7.3	
Ashmore EM HY CRP DB FD I3	9,515,191	0.1	1.5	--	-10.3	--	-3.4	--	--	--	--	--	--	--
Ashmore Emerging Markets	19,774,804	0.2	-7.0	--	-13.6	--	--	--	--	--	--	--	--	--
Ashmore Local Currency	97,262,007	1.2	10.3	2	-2.7	88	-3.4	93	-8.1	99	-3.4	99	--	--
JP Morgan ELMI+			5.5	27	-1.4	77	-0.2	67	-3.9	97	-2.6	99	2.7	99
Excess Return			4.8		-1.3		-3.2		-4.2		-0.8			
JP Morgan EMBI Global Index			5.2	29	4.7	20	4.4	13	2.4	35	6.0	8	7.1	9
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
GAM Emerging Markets Rates	42,473,896	0.5	3.8	86	2.7	25	3.0	28	1.7	37	--	--	--	--
JP Morgan ELMI+			5.5	49	-1.4	83	-0.2	68	-3.9	73	-2.6	98	2.7	99
Excess Return			-1.7		4.1		3.2		5.6					
JP Morgan EMBI Global Index			5.2	54	4.7	7	4.4	12	2.4	26	6.0	20	7.1	62
eA All Emg Mkts Fixed Inc Gross Median			5.4		1.1		1.4		0.3		4.0		7.3	
Gramercy Funds Management LLC	226,827,800	2.9	2.1	99	4.7	7	6.1	3	10.4	1	--	--	--	--
JP Morgan ELMI+			5.5	49	-1.4	83	-0.2	68	-3.9	73	-2.6	98	2.7	99
Excess Return			-3.4		6.1		6.3		14.3					
JP Morgan EMBI Global Index			5.2	54	4.7	7	4.4	12	2.4	26	6.0	20	7.1	62
eA All Emg Mkts Fixed Inc Gross Median			5.4		1.1		1.4		0.3		4.0		7.3	
Prudential Investment Management	73,837,920	0.9	-1.3	99	-7.5	99	-7.8	99	--	--	--	--	--	--
JP Morgan ELMI+			5.5	49	-1.4	83	-0.2	68	-3.9	73	-2.6	98	2.7	99
Excess Return			-6.8		-6.1		-7.6							
JP Morgan EMBI Global Index			5.2	54	4.7	7	4.4	12	2.4	26	6.0	20	7.1	62
eA All Emg Mkts Fixed Inc Gross Median			5.4		1.1		1.4		0.3		4.0		7.3	

Absolute Return (Alpha Pool)



San Bernardino County Employees' Retirement Association

Alpha Pool Strategies Performance Detail - Gross

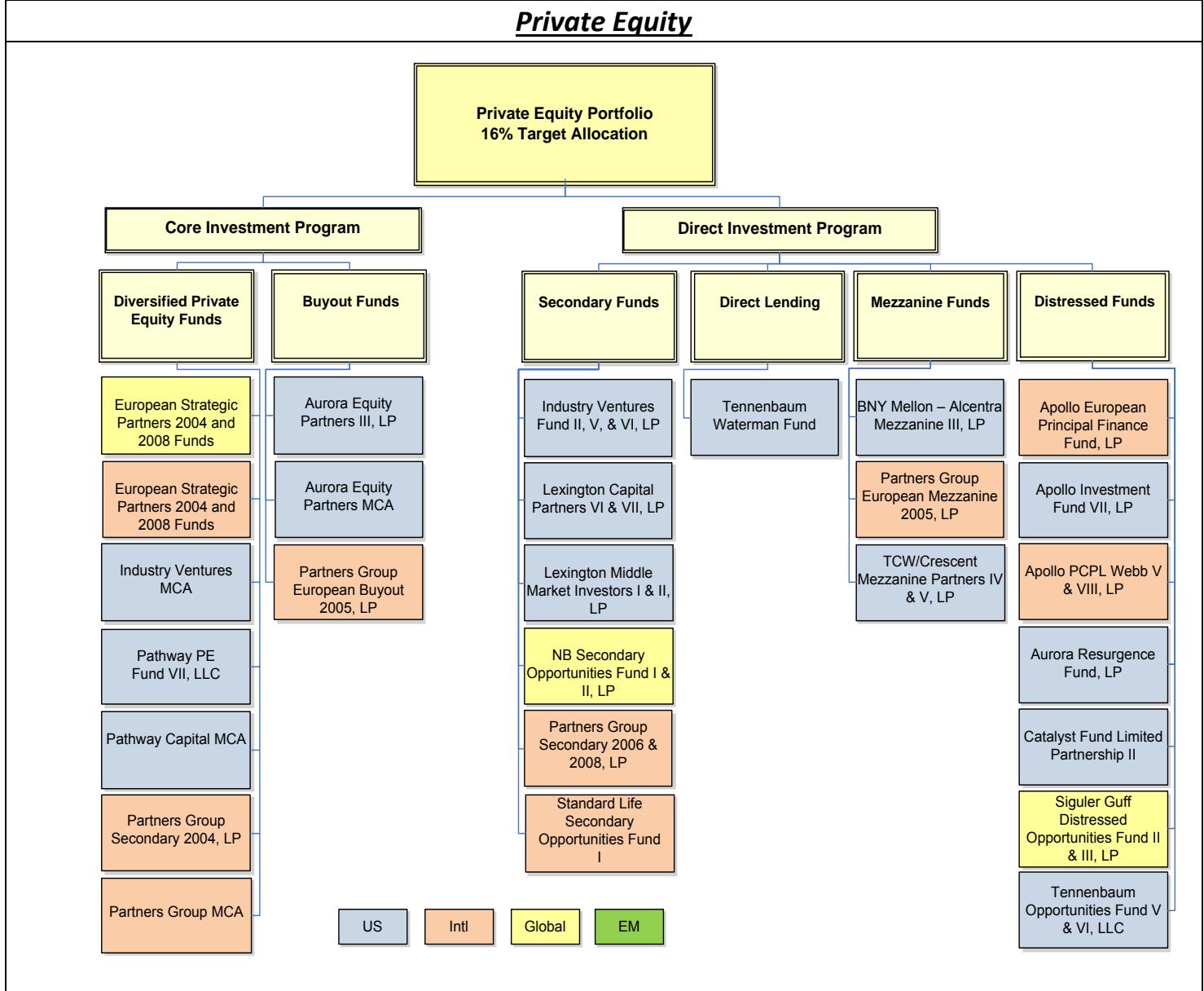
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Alpha Pool Composite	1,499,014,675	18.8	-2.5	22	-7.8	61	-6.5	52	1.2	80	4.0	13	--	--
91 Day T-Bill + 3%			0.8	6	2.3	2	3.1	1	3.1	27	3.1	47	4.0	14
Excess Return			-3.3		-10.1		-9.6		-1.9		0.9			
InvestorForce Public DB Hedge Funds Gross Median			-3.1		-6.7		-6.5		2.3		3.0		2.6	
Alpha Liquidity (Ssga)	155,079,075	1.9	0.2	90	0.2	65	0.3	62	0.3	79	0.3	92	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Apollo Global Management	59,033,594	0.7	-1.3	95	1.6	50	--	--	--	--	--	--	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Ares Eco Alpha	196,454,162	2.5	0.1	90	-7.7	98	-44.8	99	-15.8	99	-6.1	99	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Ares Strategic Investment	216,452,662	2.7	-1.9	96	-12.3	99	118.2	1	--	--	--	--	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Birch Grove Credit Strategies	97,882,188	1.2	-2.6	99	-2.4	86	-0.3	69	--	--	--	--	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Sterling Stamos	145,203,547	1.8	-0.8	94	-1.1	74	0.7	55	3.3	17	2.1	68	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Stone Tower Off (Apollo)	339,465,264	4.3	-4.9	99	-6.9	97	-4.8	97	2.9	27	6.1	7	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Zais	95,752,007	1.2	-12.8	99	-20.2	99	-17.2	99	-0.7	88	7.7	1	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Zais Group Invest Advisors	171,660,328	2.2	0.0	91	-13.9	99	-10.9	99	1.8	47	--	--	--	--
eA All Global Fixed Inc Gross Median			3.5		1.6		1.1		1.6		3.1		5.2	
Zais Zephyr A 6 LP	19,674,023	0.2	--	--	--	--	--	--	--	--	--	--	--	--



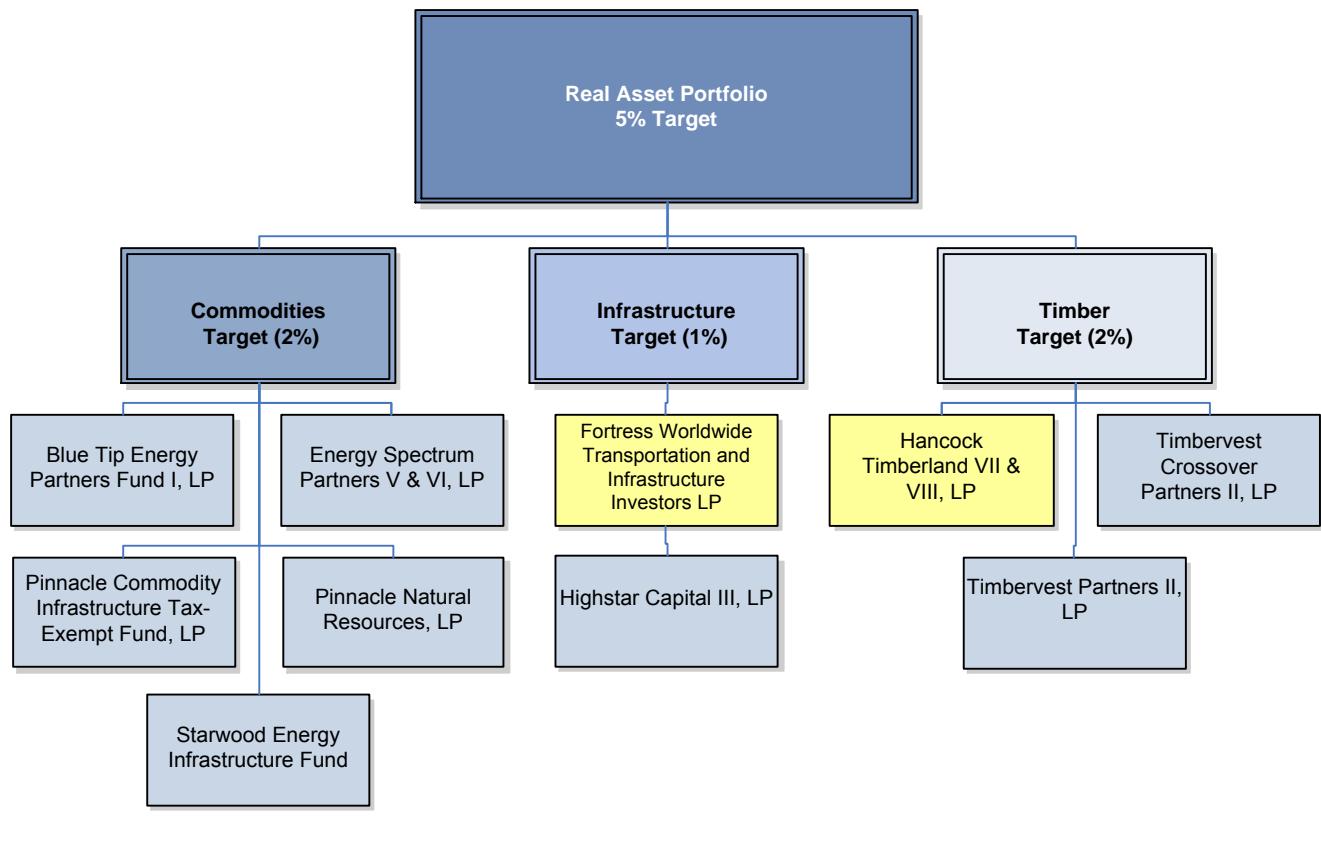
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Private Equity



Real Asset Portfolio



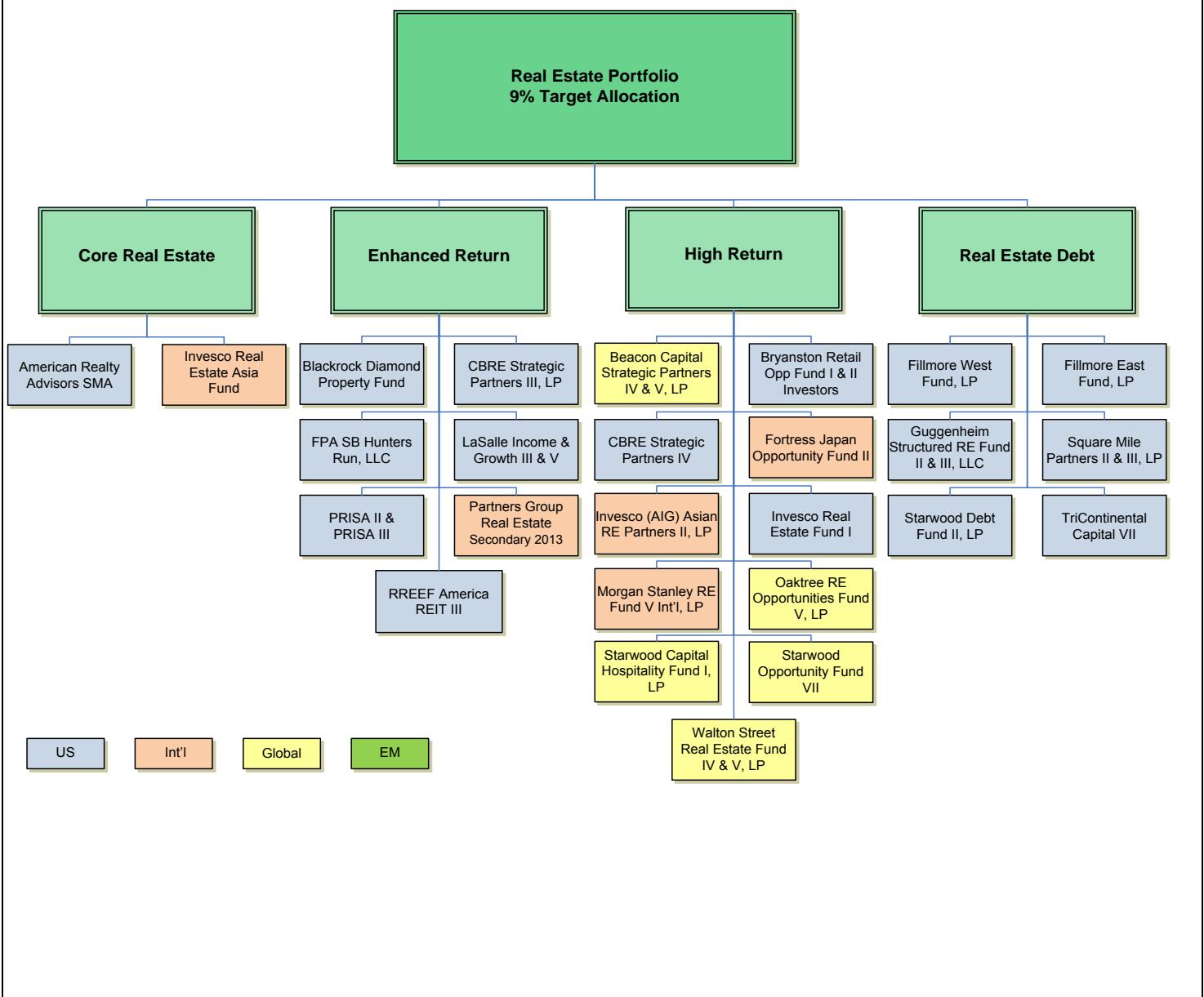
Int'l

US

EM

Global

Real Estate



San Bernardino County Employees' Retirement Association

Alternatives Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Private Equity Composite	1,222,778,134	15.4	3.6	--	7.0	--	13.6	--	14.7	--	12.6	--	10.6	--
Cambridge Associates Global All PE (Qtr Lag)			1.8	--	5.0	--	6.7	--	12.3	--	11.6	--	11.2	--
Excess Return			1.8		2.0		6.9		2.4		1.0		-0.6	
Russell 3000			1.0	--	-0.5	--	-0.3	--	11.1	--	11.0	--	6.9	--
Cambridge Associates US All PE (1 Qtr Lag)			0.4	--	2.8	--	5.5	--	12.5	--	12.5	--	11.4	--
InvestorForce Public DB Private Eq Gross Median			--		--		--		--		--		--	
Real Estate Composite	531,333,384	6.7	4.0	8	10.2	15	13.0	25	11.5	81	11.2	87	4.3	99
NCREIF Property Index 1 Qtr Lag			2.9	20	9.4	33	13.3	22	12.0	78	12.2	75	7.8	6
Excess Return			1.1		0.8		-0.3		-0.5		-1.0		-3.5	
InvestorForce Public DB Real Estate Pub+Priv Gross Median			2.0		8.9		12.2		12.8		12.9		6.8	
Real Assets Composite	411,996,737	5.2	-1.8	99	-9.1	81	-10.7	82	-0.6	71	1.9	85	2.3	99
Bloomberg Commodity Index			0.5	78	-23.1	87	-19.5	87	-16.8	93	-14.1	99	-6.2	99
Excess Return			-2.3		14.0		8.8		16.2		16.0		8.5	
NCREIF Timberland 1 Qtr Lag			1.9	29	3.2	39	5.0	37	8.4	27	6.8	42	6.9	1
InvestorForce Public DB Real Assets/Commodities Gross Median			1.5		-0.3		1.3		5.0		5.8		5.0	
Timber	193,954,544	2.4	-0.4	--	-3.7	--	-4.0	--	3.4	--	4.1	--	3.1	--
NCREIF Timberland 1 Qtr Lag			1.9	--	3.2	--	5.0	--	8.4	--	6.8	--	6.9	--
Excess Return			-2.3		-6.9		-9.0		-5.0		-2.7		-3.8	
Infrastructure	65,224,434	0.8	-9.0	--	-30.5	--	-29.4	--	-11.3	--	-1.4	--	--	--
Russell 3000			1.0	--	-0.5	--	-0.3	--	11.1	--	11.0	--	6.9	--
Excess Return			-10.0		-30.0		-29.1		-22.4		-12.4			
Commodities	152,817,758	1.9	0.6	--	0.0	--	-6.4	--	0.3	--	1.7	--	--	--
Bloomberg Commodity Index			0.5	--	-23.1	--	-19.5	--	-16.8	--	-14.1	--	-6.2	--
Excess Return			0.1		23.1		13.1		17.1		15.8			



NEPC, LLC

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Appendix: Private Equity and Real Estate Performance

San Bernardino County Employees' Retirement Association

Private Equity Performance Ending December 31, 2015

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Cumulative Distributions	Valuation	IRR	TVPI Ratio
Apollo European Principal Finance Fund (Feeder), L.P.	2009	\$ 53,594,278	\$ 46,264,448	\$ 61,331,816	\$ 7,401,024	11.82%	1.49
Apollo Investment Fund VII, L.P.	2008	\$ 10,000,000	\$ 8,324,297	\$ 14,026,894	\$ 3,144,715	25.01%	2.07
Apollo PCPL Webb V	2010	\$ 4,844,398	\$ 4,844,398	\$ 5,169,483	\$ 68,457	6.57%	1.08
Apollo PCPL Webb VIII	2010	\$ 4,734,303	\$ 4,734,303	\$ 12,107,739	\$ 19,567	46.43%	2.56
ARES Private Equity*	2015	\$ 65,000,000	\$ -	\$ -	\$ 17,524,371	-	-
Aurora Equity Partners III, L.P.	2005	\$ 25,000,000	\$ 23,544,536	\$ 41,140,682	\$ 2,850,945	14.55%	1.75
Aurora Equity Partners IV, L.P.	2012	\$ 20,000,000	\$ 15,523,201	\$ 1,381,143	\$ 22,869,010	13.95%	1.38
Aurora Resurgence Fund, L.P.	2008	\$ 15,000,000	\$ 5,653,009	\$ 10,350,965	\$ -	17.60%	1.82
Baring Asia Private Equity Fund IV, L.P.	2015	\$ 2,931,918	\$ 2,922,361	\$ 435,400	\$ 2,405,503	-3.25%	0.97
BNY Mellon - Alcentra Mezzanine III	2012	\$ 25,000,000	\$ 23,254,658	\$ 26,583,881	\$ 57,766	12.52%	1.15
Catalyst Fund II, L.P.	2007	\$ 10,000,000	\$ 9,934,668	\$ 4,033,566	\$ 17,156,313	13.78%	2.12
Catalyst Fund LP IV, L.P.	2015	\$ 8,000,000	\$ 2,300,242	\$ -	\$ 2,275,540	-1.70%	0.99
Charlesbank Equity Fund VIII	2015	\$ 7,500,000	\$ 2,811,599	\$ -	\$ 2,888,998	6.00%	1.03
DRI II, L.P.	2009	\$ 20,000,000	\$ 19,917,669	\$ 25,865,694	\$ 427,500	19.72%	1.33
European Strategic Partners 2004	2004	\$ 240,168,169	\$ 219,356,847	\$ 200,439,878	\$ 67,977,336	3.64%	1.22
European Strategic Partners 2008	2010	\$ 31,152,920	\$ 23,906,312	\$ 7,391,175	\$ 19,865,163	4.57%	1.13
Industry Ventures Fund V	2008	\$ 10,000,000	\$ 9,500,000	\$ 18,531,033	\$ 10,498,424	34.25%	3.06
Industry Ventures Fund VI	2011	\$ 20,000,000	\$ 17,890,000	\$ 9,961,098	\$ 13,490,691	12.67%	1.31
Industry Ventures Partnership Holdings Fund II, L.P.*	2012	\$ 25,000,000	\$ 20,000,000	\$ 3,371,120	\$ 39,313,233	37.70%	2.13
Industry Ventures Partnership Holdings Fund III, L.P.*	2013	\$ 25,000,000	\$ 13,750,000	\$ 786,388	\$ 14,687,218	13.18%	1.13
Industry Ventures Partnership Holdings Fund III-A, L.P.*	2014	\$ 12,500,000	\$ 8,812,500	\$ 1,972,074	\$ 8,266,777	16.83%	1.16
Industry Ventures Secondary VII, L.P.	2013	\$ 25,000,000	\$ 14,750,000	\$ 1,307,027	\$ 15,435,277	15.61%	1.14
Insight Venture Partners III Co-Invest*	2014	\$ 4,000,000	\$ 3,544,000	\$ -	\$ 3,847,016	6.87%	1.09
Lexington Capital Partners VI-B	2006	\$ 25,000,000	\$ 24,591,319	\$ 25,615,794	\$ 8,180,905	6.92%	1.37
Lexington Capital Partners VII (Offshore)	2011	\$ 25,000,000	\$ 18,853,889	\$ 15,076,501	\$ 13,570,164	18.16%	1.51
Lexington Middle Market I	2005	\$ 25,000,000	\$ 24,771,942	\$ 29,484,921	\$ 8,536,092	11.42%	1.53
Lexington Middle Market II - Offshore	2008	\$ 10,000,000	\$ 9,261,827	\$ 7,110,864	\$ 5,872,951	13.18%	1.40
NB Secondary Opportunities I, LP	2005	\$ 20,000,000	\$ 18,500,843	\$ 20,184,534	\$ 4,635,449	7.21%	1.34
NB Secondary Opportunities II, LP	2008	\$ 20,000,000	\$ 16,771,831	\$ 18,522,846	\$ 7,430,611	16.05%	1.53
Partners Group Access 632, L.P.	2014	\$ 2,782,028	\$ 2,782,028	\$ -	\$ 2,995,414	3.75%	1.07
Partners Group Access 648, L.P.	2014	\$ 4,409,153	\$ 4,028,602	\$ 19,449	\$ 2,668,974	-26.64%	0.67
Partners Group Access 680 L.P.	2015	\$ 7,272,991	\$ 7,272,991	\$ -	\$ 7,067,580	-2.82%	0.97
Partners Group Client Access 8 LP	2014	\$ 5,531,585	\$ 5,531,585	\$ -	\$ 11,568,206	47.38%	2.09
Partners Group Direct Investment 2012, L.P.	2013	\$ 18,087,766	\$ 15,128,966	\$ 2,365,041	\$ 15,563,726	12.50%	1.18
Partners Group European Mandate, L.P.	2004	\$ 236,588,439	\$ 196,356,003	\$ 184,064,508	\$ 73,964,879	5.55%	1.31
Partners Group European Mezzanine 2005	2005	\$ 101,076,654	\$ 101,076,654	\$ 106,872,407	\$ 30,695,830	5.09%	1.36
Partners Group Princess Learning IC LTD	2014	\$ 5,014,422	\$ 3,504,697	\$ 1,550,144	\$ 1,725,656	-7.94%	0.93
Partners Group Seabras Holdings, LLC	2015	\$ 4,800,000	\$ 1,933,156	\$ -	\$ 1,933,156	0.00%	1.00
Partners Group Secondary 2006 LP	2006	\$ 54,343,854	\$ 51,077,528	\$ 46,527,983	\$ 13,740,117	3.70%	1.18
Partners Group Secondary 2008, L.P.	2009	\$ 26,540,307	\$ 23,690,725	\$ 20,381,890	\$ 14,208,245	9.79%	1.45
Partners Group Starfrost Limited	2014	\$ 6,184,957	\$ 3,687,483	\$ -	\$ 3,989,872	4.07%	1.08
Pathway Private Equity Fund VII, L.P.*	2004	\$ 904,500,000	\$ 747,718,670	\$ 624,962,031	\$ 538,841,165	9.86%	1.52
Siguler Guff DOF II	2006	\$ 30,000,000	\$ 30,000,000	\$ 39,432,520	\$ 3,404,162	8.95%	1.43
Siguler Guff DOF III	2008	\$ 10,000,000	\$ 9,700,000	\$ 10,523,811	\$ 4,389,355	11.00%	1.54
SL Capital SOF I LP	2014	\$ 25,000,000	\$ 13,515,185	\$ 519,171	\$ 14,861,437	13.85%	1.14
TCW/Crescent Mezzanine IV, L.P.	2006	\$ 40,000,000	\$ 39,590,976	\$ 43,109,680	\$ 1,902,398	3.06%	1.14
TCW/Crescent Mezzanine V, L.P.	2008	\$ 20,000,000	\$ 19,987,004	\$ 20,796,817	\$ 5,419,972	9.74%	1.32
Tennenbaum Opportunities Fund V, L.P.	2007	\$ 10,000,000	\$ 10,000,000	\$ 7,618,243	\$ 5,820,030	5.15%	1.34
Tennenbaum Opportunities Fund VI, L.P.	2011	\$ 20,000,000	\$ 18,992,453	\$ 4,010,986	\$ 20,238,951	9.37%	1.28
Tennenbaum Special Situations Fund IX	2015	\$ 30,000,000	\$ 9,365,448	\$ -	\$ 8,648,306	-13.22%	0.92
Tennenbaum Waterman Fund, LP	2012	\$ 70,000,000	\$ 70,000,000	\$ 12,007,234	\$ 71,224,659	9.15%	1.19
The Resolute Fund III	2014	\$ 8,000,000	\$ 2,074,625	\$ -	\$ 2,249,746	7.59%	1.08
Thoma Bravo XI	2014	\$ 8,000,000	\$ 5,838,553	\$ -	\$ 6,165,312	7.29%	1.06
Total: San Bernardino		\$ 2,372,558,144	\$ 2,007,144,031	\$ 1,686,944,430	\$ 1,183,984,164	8.29%	1.41

Note: all metrics are calculated since inception

* Denotes cash adjusted

San Bernardino County Employees' Retirement Association
 Real Estate Performance Ending December 31, 2015

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Cumulative Distributions	Valuation	IRR	TVPI Ratio
American Realty Advisors	1996	\$ 128,009,773	\$ 128,009,773	\$ 97,663,126	\$ 186,264,786	7.59%	2.22
American Realty Value Add	2006	\$ 13,125,215	\$ 13,125,215	\$ 2,675,000	\$ 29,123,711	11.05%	2.42
Beacon Capital Strategic Partners IV, L.P.	2006	\$ 39,000,000	\$ 38,000,000	\$ 26,763,990	\$ 4,816,369	-3.24%	0.83
Beacon Capital Strategic Partners V, L.P.	2007	\$ 20,000,000	\$ 18,000,000	\$ 7,924,215	\$ 3,635,932	-7.56%	0.64
BlackRock Diamond Property Fund*	2005	\$ 25,000,000	\$ 25,000,000	\$ 12,952,792	\$ 4,580,857	-6.20%	0.70
Bryanston Real Estate Opportunity Fund II, L.P.	2009	\$ 20,000,000	\$ 8,589,256	\$ 9,103,079	\$ 2,710,488	10.93%	1.38
Bryanston Retail Opportunity Fund, L.P.	2004	\$ 20,000,000	\$ 8,228,165	\$ 18,492,031	\$ 9,516,659	71.35%	3.40
CBRE Strategic Partners III	2003	\$ 10,000,000	\$ 10,000,000	\$ 12,698,783	\$ -	8.02%	1.27
CBRE Strategic Partners IV	2005	\$ 40,000,000	\$ 40,000,000	\$ 1,532,153	\$ 2,287,400	-25.52%	0.10
Fillmore East Fund	2006	\$ 25,000,000	\$ 31,403,818	\$ 20,777,177	\$ -	-9.78%	0.66
Fillmore West Fund	2008	\$ 20,000,000	\$ 19,561,557	\$ 10,238,311	\$ 12,854,937	2.67%	1.18
Fortress Japan Opportunity Fund II	2012	\$ 21,739,130	\$ 10,441,818	\$ 1,574,998	\$ 18,679,183	22.78%	1.97
Invesco Asian Real Estate Partners II (USD), LP	2007	\$ 20,000,000	\$ 8,314,147	\$ 6,297,511	\$ 4,371,169	6.63%	1.28
Invesco High Yield Debt Fund I	2007	\$ 20,000,000	\$ 20,000,000	\$ 8,567,605	\$ -	-35.57%	0.43
Invesco Real Estate Asia Fund*	2014	\$ 51,732,500	\$ 51,732,500	\$ -	\$ 51,570,556	-0.21%	1.00
INVESCO Real Estate Fund I	2005	\$ 10,000,000	\$ 9,248,390	\$ 8,723,250	\$ 1,208,128	1.39%	1.07
LaSalle Income & Growth Fund IV	2005	\$ 20,000,000	\$ 19,469,417	\$ 13,482,024	\$ -	-5.51%	0.69
Morgan Stanley Real Estate Fund V International	2005	\$ 27,500,000	\$ 27,377,414	\$ 30,824,620	\$ 2,226,782	7.03%	1.20
Oaktree Real Estate Opportunities V	2012	\$ 25,000,000	\$ 25,000,000	\$ 19,750,000	\$ 18,196,753	14.44%	1.51
Partners Group RE Secondary 2013 (USD) A	2014	\$ 65,000,000	\$ 18,195,704	\$ 1,250,060	\$ 22,894,781	36.21%	1.32
Prologis Japan Fund	2005	\$ 25,290,819	\$ 25,290,819	\$ 33,126,118	\$ -	4.81%	1.31
Prudential PRISA II	2004	\$ 91,124,837	\$ 91,124,837	\$ 28,445,102	\$ 99,138,372	8.28%	1.35
Prudential PRISA III	2003	\$ 40,000,000	\$ 40,000,300	\$ 37,166,405	\$ 31,779,395	20.11%	1.62
RREEF America REIT III	2004	\$ 20,000,000	\$ 20,539,309	\$ 22,814,199	\$ 984,234	3.13%	1.16
Square Mile Partners II	2007	\$ 20,000,000	\$ 19,831,232	\$ 4,674,665	\$ 981,760	-18.29%	0.29
Square Mile Partners III LP	2008	\$ 20,000,000	\$ 21,511,975	\$ 26,192,253	\$ 4,885,892	12.60%	1.44
Starwood Capital Hospitality Fund I-2	2006	\$ 30,000,000	\$ 30,000,000	\$ 18,084,672	\$ 12,838,392	0.45%	1.03
Starwood Debt Fund II, LP	2008	\$ 20,000,000	\$ 17,599,882	\$ 21,669,663	\$ 255,986	6.49%	1.25
Starwood Opportunity Fund VII - A	2006	\$ 25,000,000	\$ 25,000,000	\$ 11,011,048	\$ 9,808,650	-2.22%	0.83
Structured Real Estate III, LP (Guggenheim)	2008	\$ 20,000,000	\$ 20,000,000	\$ 16,320,664	\$ -	-4.99%	0.82
Tri Continental Capital VII	2005	\$ 23,000,000	\$ 22,343,057	\$ 1,186,286	\$ 1,909,720	-20.95%	0.14
Tuckerman Multi-Family Development Fund III	2002	\$ 10,000,000	\$ 10,219,311	\$ 16,939,699	\$ -	26.67%	1.66
Walton Street Real Estate Fund IV, LP	2003	\$ 10,000,000	\$ 9,770,890	\$ 14,759,788	\$ 1,310,661	10.92%	1.64
Walton Street Real Estate Fund V, LP	2006	\$ 40,000,000	\$ 40,000,000	\$ 14,352,676	\$ 17,615,994	-2.87%	0.80
Total: San Bernardino		\$ 1,015,522,274	\$ 922,928,786	\$ 578,033,964	\$ 556,447,546	3.73%	1.22

Note: all metrics are calculated since inception



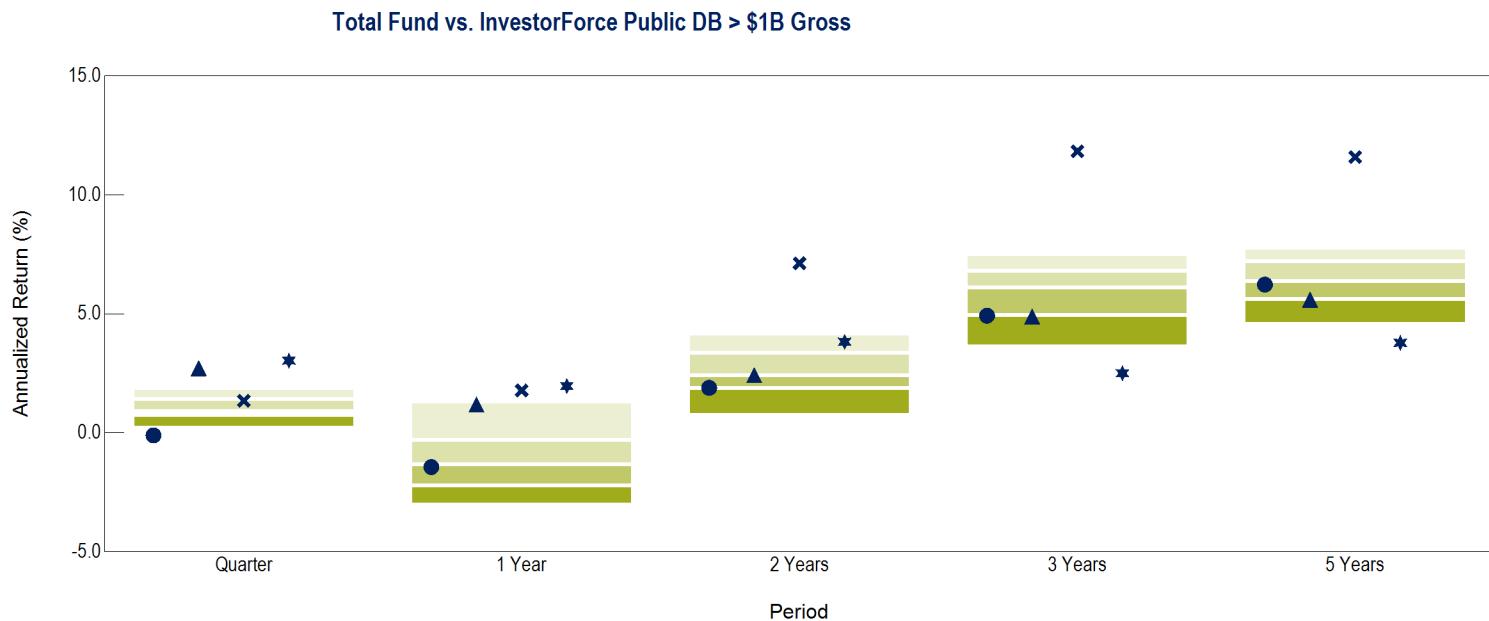
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Appendix: Market Environment

San Bernardino County Employees' Retirement Association

Total Fund Return Summary vs. Peer Universe



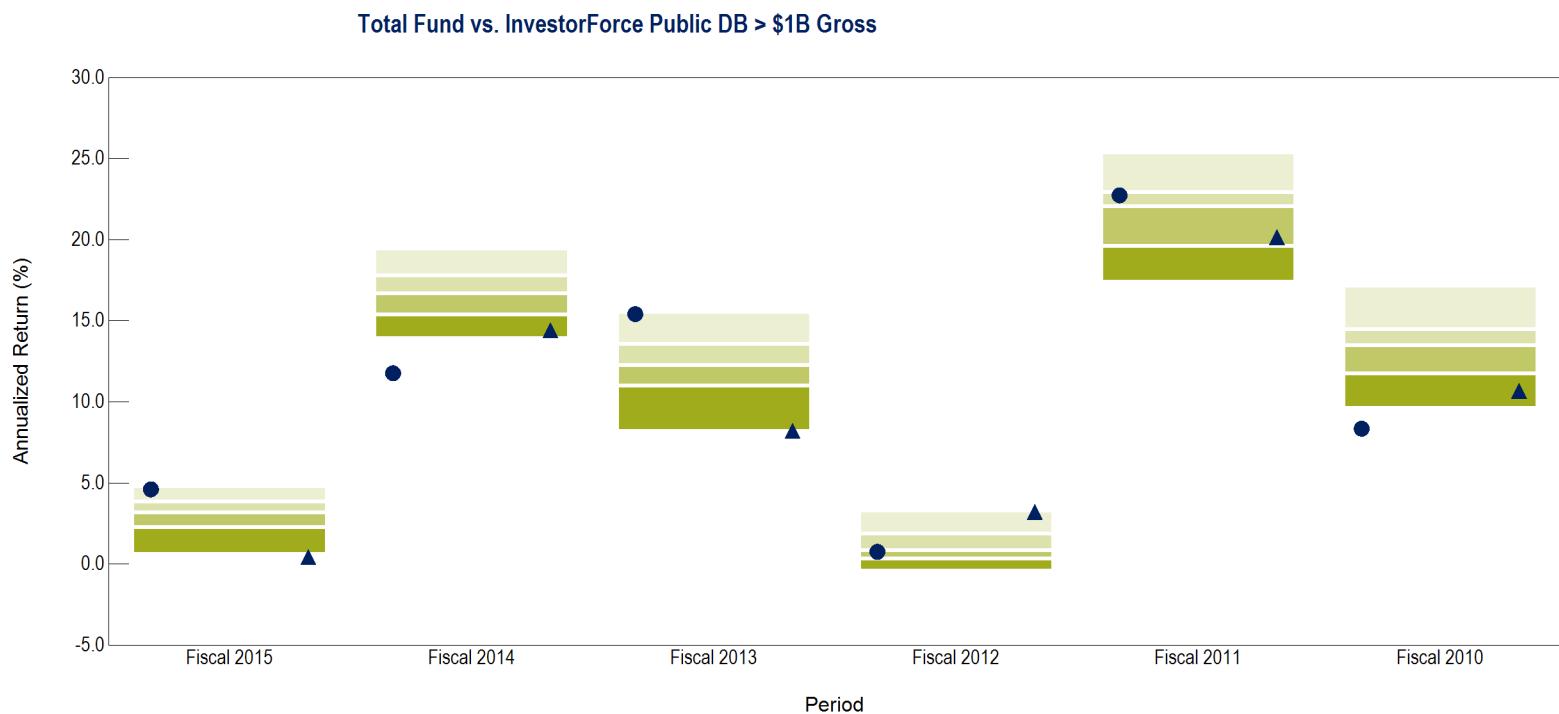
	Return (Rank)								
5th Percentile	1.9	1.3	4.2	7.5	7.8				
25th Percentile	1.4	-0.3	3.4	6.8	7.2				
Median	0.9	-1.3	2.4	6.1	6.4				
75th Percentile	0.8	-2.2	1.9	5.0	5.6				
95th Percentile	0.2	-3.0	0.8	3.6	4.6				
# of Portfolios	31	31	30	29	29				
● Total Fund	-0.1	(99)	-1.4	(58)	1.9	(73)	4.9	(76)	6.2 (57)
▲ Policy Index	2.7	(1)	1.2	(9)	2.4	(51)	4.9	(77)	5.6 (79)
✖ S&P 500	1.3	(30)	1.8	(1)	7.1	(1)	11.8	(1)	11.6 (1)
* Barclays Aggregate	3.0	(1)	2.0	(1)	3.8	(12)	2.5	(99)	3.8 (98)
◆ 60% MSCI World (Gross) / 40% CITI WGBI	--	(--)	--	(--)	--	(--)	--	(--)	-- (--)



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San Bernardino County Employees' Retirement Association
 Fiscal Year Ending 6/30 Total Fund Return Summary vs. Peer Universe



	Return (Rank)						
5th Percentile	4.8	19.4	15.5	3.3	25.4	17.2	
25th Percentile	3.9	17.8	13.6	1.9	22.9	14.5	
Median	3.2	16.7	12.3	0.9	22.1	13.5	
75th Percentile	2.3	15.4	11.0	0.3	19.6	11.8	
95th Percentile	0.6	13.9	8.2	-0.4	17.4	9.6	
# of Portfolios	92	65	78	70	67	66	
● Total Fund	4.6	(7)	11.8	(99)	15.4	(7)	0.8
▲ Policy Index	0.4	(96)	14.4	(87)	8.2	(96)	3.2
					(58)	(32)	22.7
					(6)	(71)	20.2
							8.3
							(99)
							10.7
							(91)



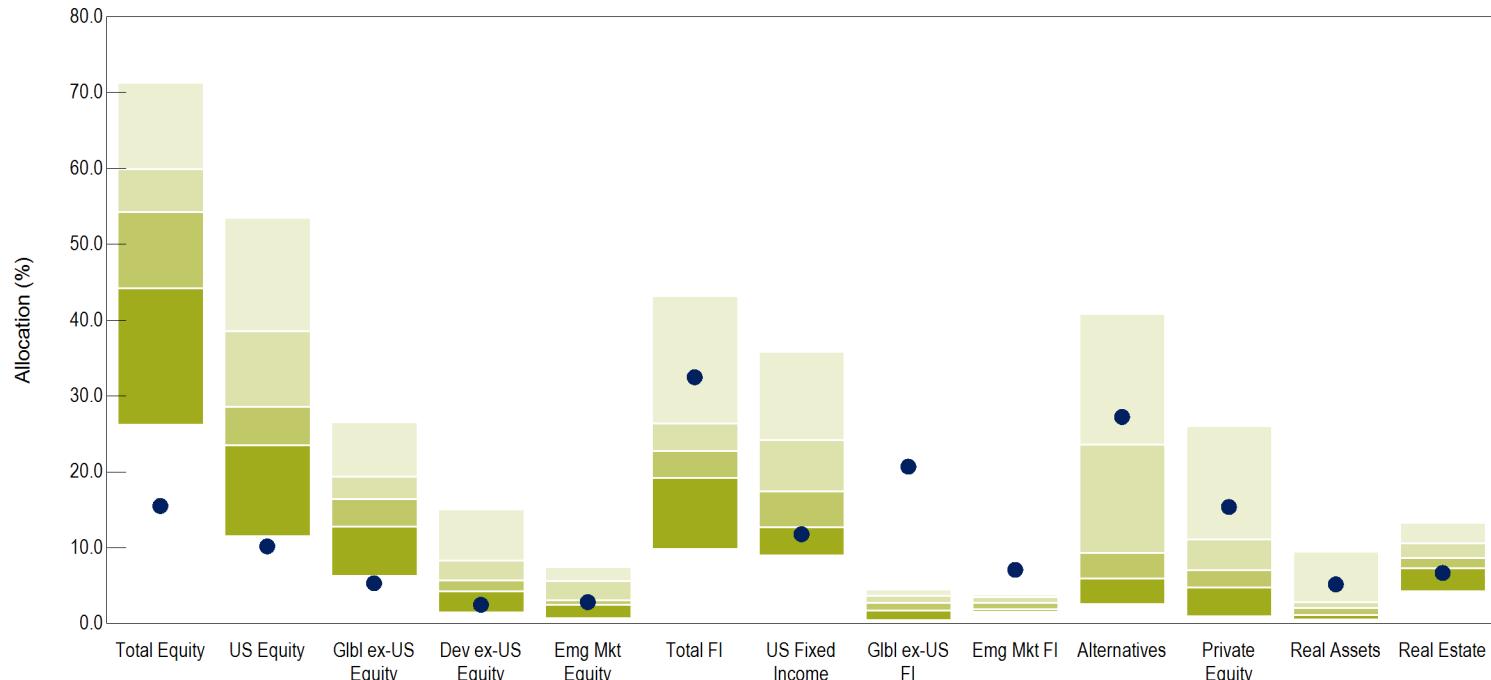
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San Bernardino County Employees' Retirement Association

Total Fund Allocations vs. Peer Universe

Total Plan Allocation vs. InvestorForce Public DB > \$1B Gross



Allocation (Rank)

5th Percentile	71.3	53.5	26.5	15.1	7.5	43.2	35.8	4.5	3.8	40.8	26.0	9.5	13.3	--
25th Percentile	59.9	38.6	19.5	8.4	5.7	26.5	24.3	3.7	3.6	23.7	11.2	2.9	10.7	--
Median	54.4	28.7	16.5	5.8	3.1	22.8	17.5	2.8	2.8	9.4	7.1	2.1	8.7	--
75th Percentile	44.2	23.6	12.9	4.4	2.6	19.3	12.8	1.8	2.0	6.0	4.9	1.3	7.4	--
95th Percentile	26.3	11.6	6.4	1.6	0.8	9.9	9.1	0.6	1.7	2.7	1.0	0.7	4.4	--
# of Portfolios	25	24	23	10	16	26	22	8	6	22	20	8	19	--
● Total Fund	15.5 (99)	10.2 (97)	5.3 (98)	2.5 (89)	2.8 (70)	32.5 (12)	11.8 (83)	20.7 (1)	7.1 (1)	27.2 (20)	15.4 (13)	5.2 (13)	6.7 (81)	--



NEPC, LLC

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San Bernardino County Employees' Retirement Association

Index Performance Summary as of 3/31/2016

	2009	2010	2011	2012	2013	2014	2015	JAN	FEB	MAR	YTD
Barclays US Strips 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	6.9%	4.6%	-0.3%	11.4%
JPM GBI-EM Global Diversified	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	0.4%	1.4%	9.1%	11.0%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	2.1%	2.2%	2.8%	7.3%
Citi WGBI	2.6%	5.2%	6.4%	1.7%	-4.0%	-0.5%	-3.6%	1.4%	2.9%	2.7%	7.1%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	0.3%	1.7%	4.8%	6.8%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	-3.4%	-0.4%	10.1%	6.0%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	-6.5%	-0.2%	13.2%	5.7%
JPM EMBI Global Diversified	29.8%	12.2%	7.4%	17.4%	-5.3%	7.4%	1.2%	-0.2%	1.9%	3.3%	5.0%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	-1.6%	0.6%	4.4%	3.4%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.6%	1.4%	0.7%	0.9%	3.0%
Barclays US Agg Iterm	6.5%	6.2%	6.0%	3.6%	-1.0%	4.1%	1.2%	1.3%	0.5%	0.6%	2.3%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.2%	0.2%	0.3%	1.7%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	-5.0%	-0.1%	6.8%	1.4%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	-0.7%	-0.6%	2.6%	1.3%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	-5.4%	0.0%	7.0%	1.2%
Barclays US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	0.5%	0.1%	0.4%	1.0%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	-1.7%	-1.6%	3.8%	0.4%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	-8.0%	0.7%	8.3%	0.4%
MSCI ACWI	34.6%	12.7%	-7.4%	16.1%	22.8%	4.2%	-2.4%	-6.0%	-0.7%	7.4%	0.2%
Russell 2000	27.2%	26.9%	-4.2%	16.4%	38.8%	4.9%	-4.4%	-8.8%	0.0%	8.0%	-1.5%
Credit Suisse Hedge Fund	18.6%	11.0%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-1.4%	-1.1%	N/A	-2.5%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-7.2%	-1.8%	6.5%	-3.0%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-11.1%	-0.5%	8.3%	-4.2%

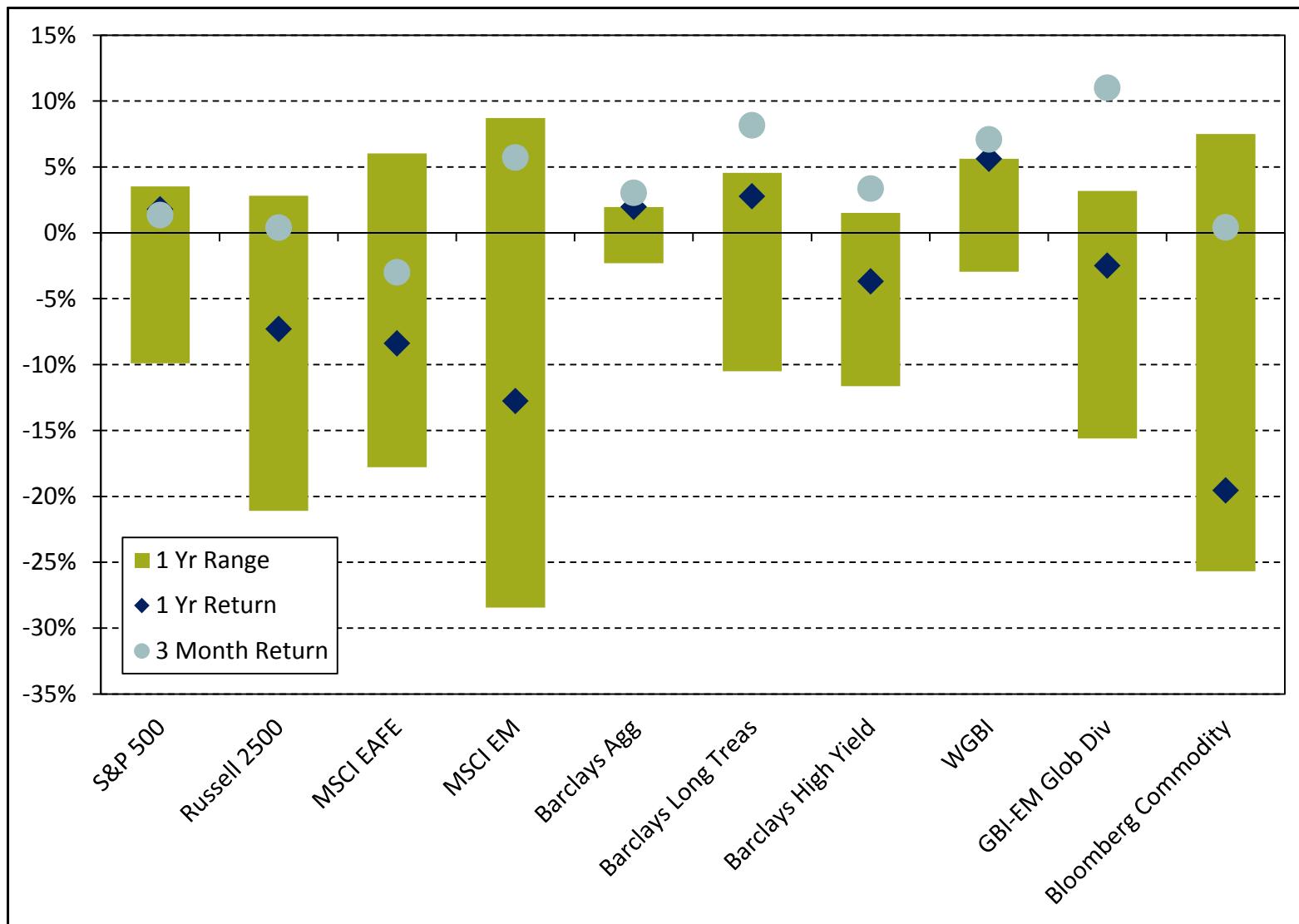
Source: Morningstar Direct



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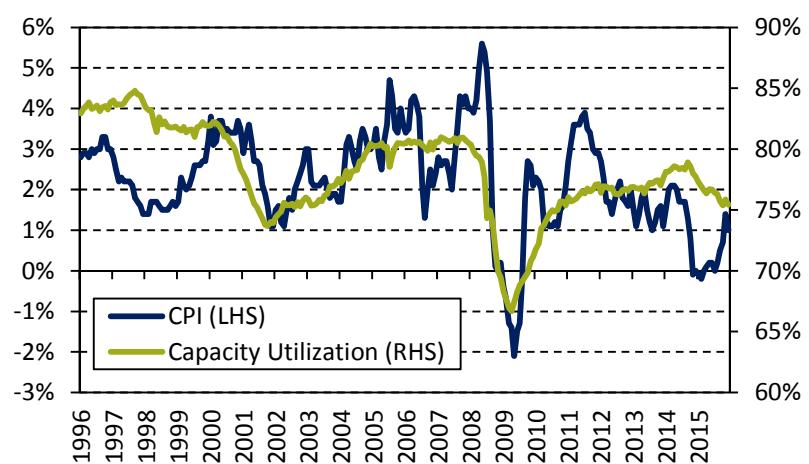
March 31, 2016

San Bernardino County Employees' Retirement Association
Broad Market Performance Summary as of 3/31/2016



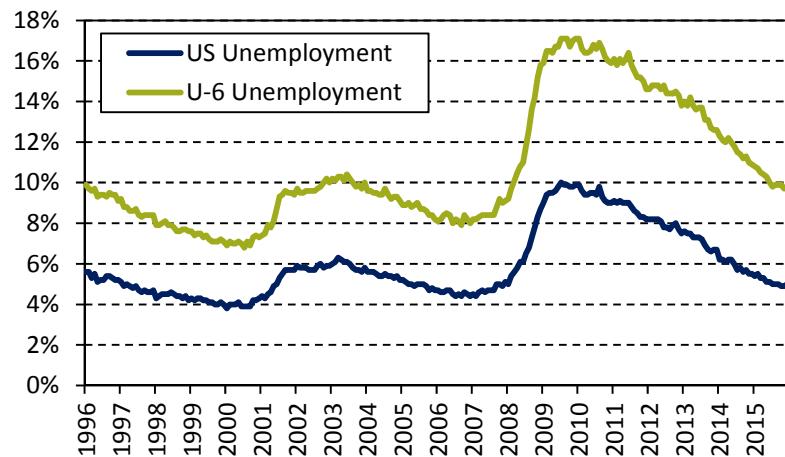
Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, Citigroup, JP Morgan
*1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago

Inflation has increased off lows



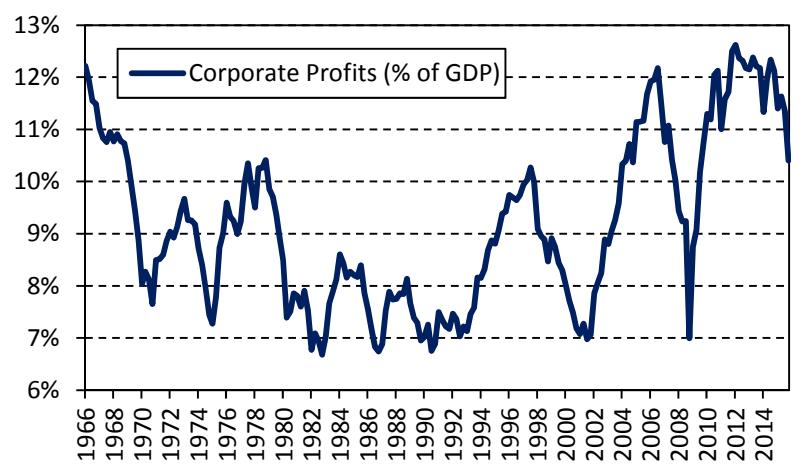
Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics

Unemployment steadily improving



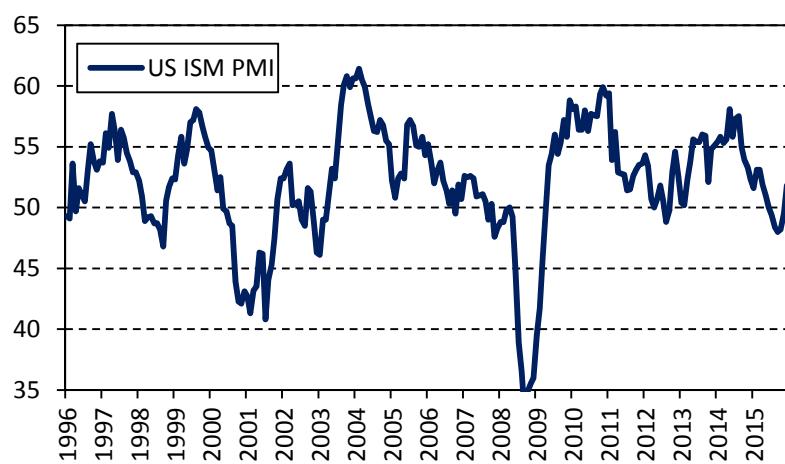
Source: Bloomberg, Bureau of Labor Statistics

Corporate profits lower off secular highs



Source: Bloomberg, Bureau of Economic Analysis

Manufacturing trending higher after dip



Source: Bloomberg, Institute for Supply Management

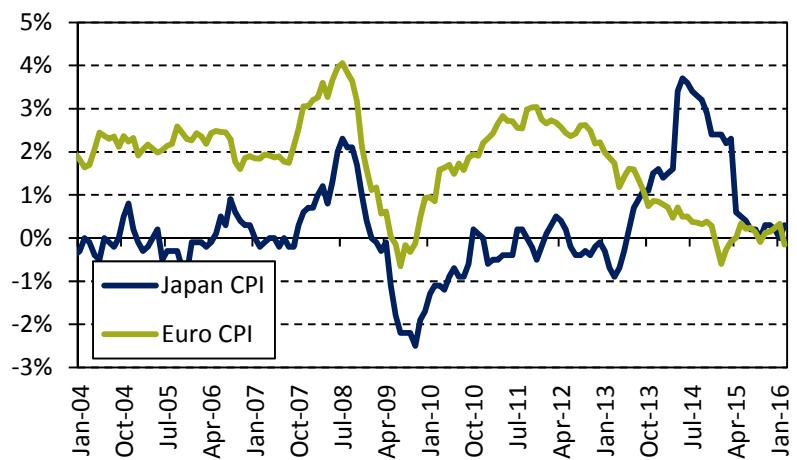


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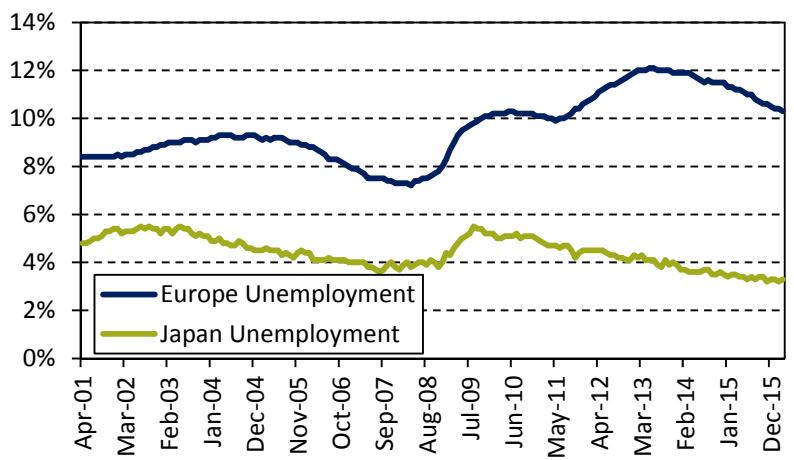
San Bernardino County Employees' Retirement Association
International Economic Indicators

Inflation remains muted



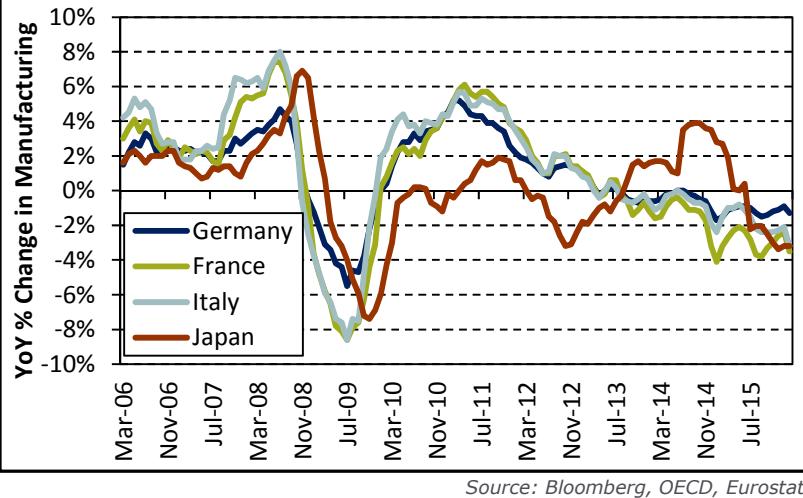
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

Europe employment recovery lagging



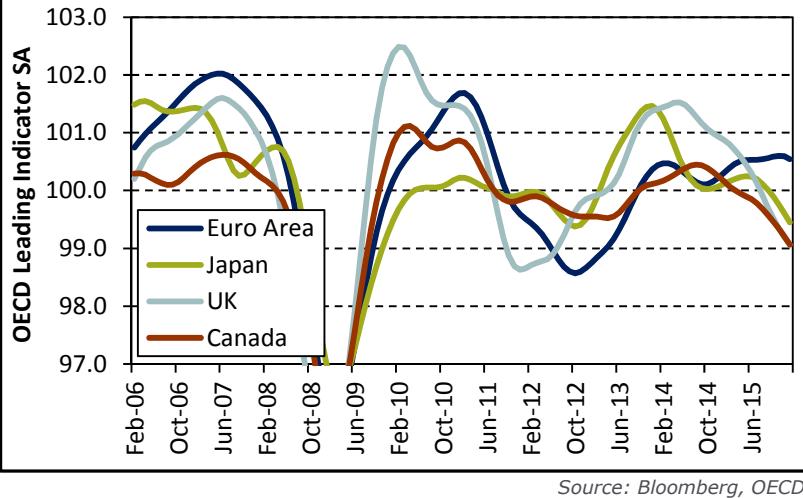
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

Manufacturing in developed economies has lagged



Source: Bloomberg, OECD, Eurostat

Leading indicators mostly neutral



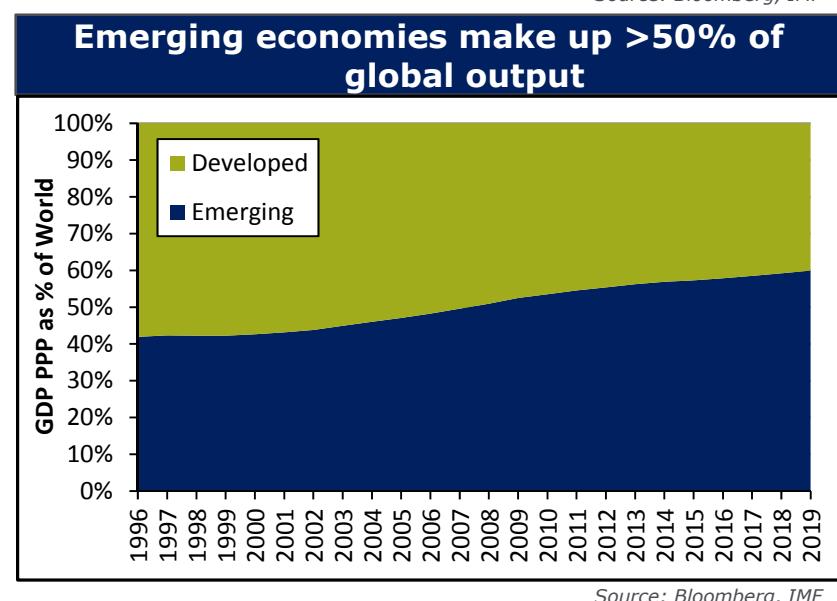
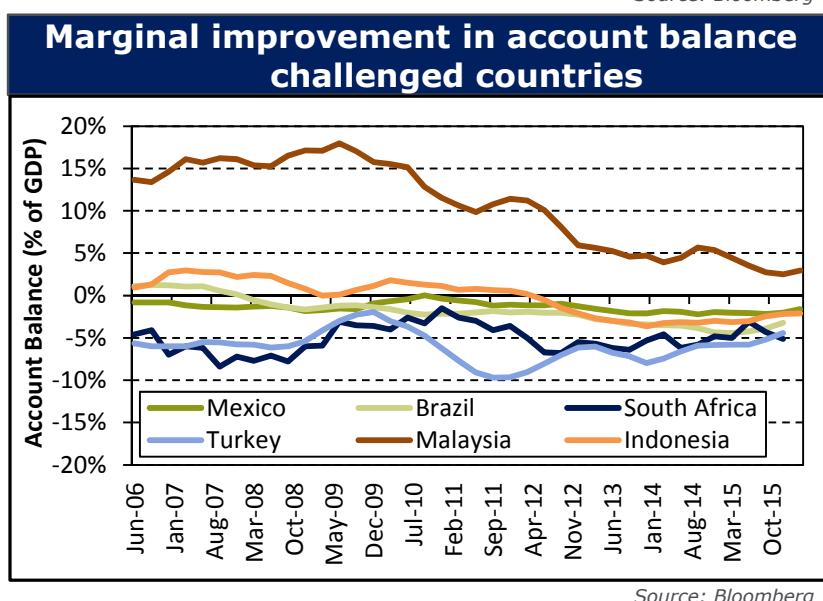
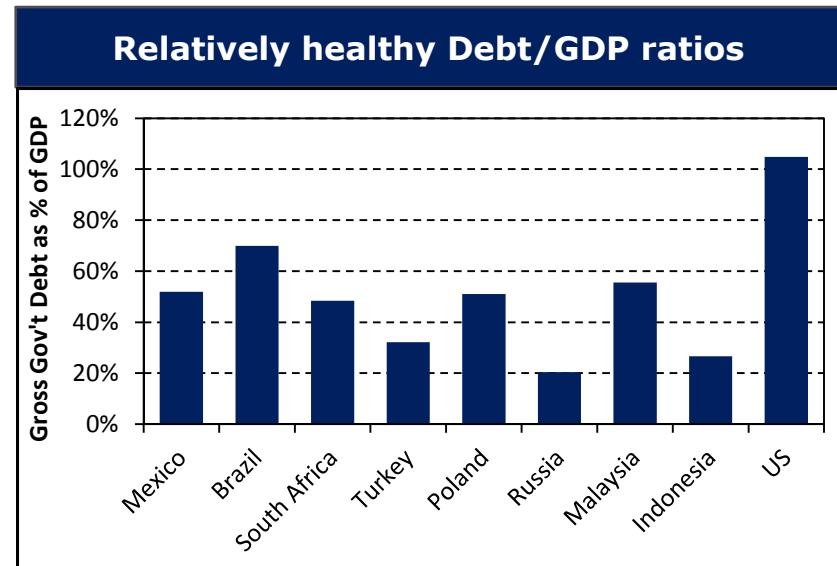
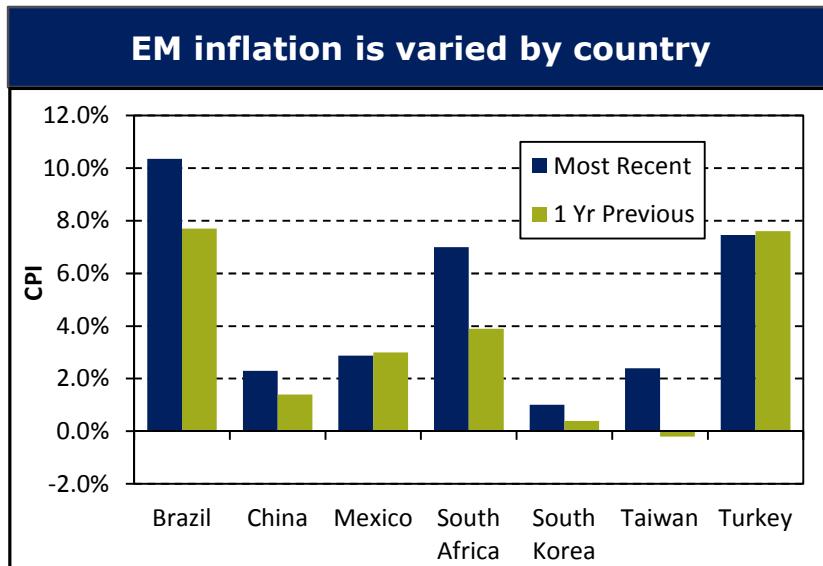
Source: Bloomberg, OECD



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March 31, 2016

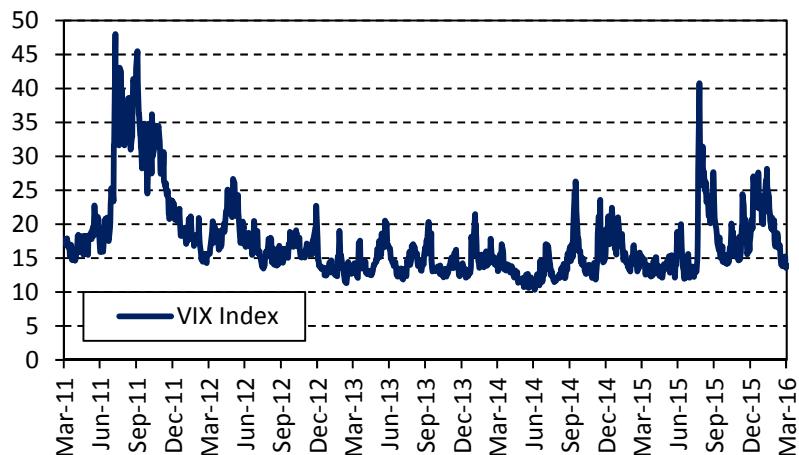
San Bernardino County Employees' Retirement Association
Emerging Market Economic Indicators



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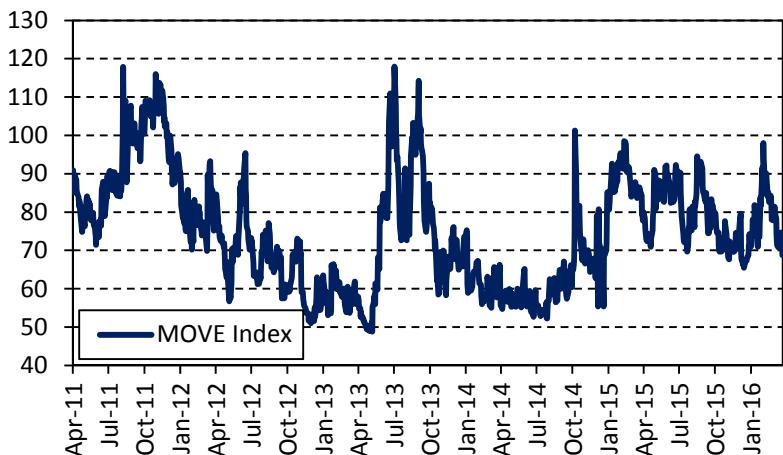
March 31, 2016

Equity volatility decreasing off early year highs



Source: Bloomberg, CBOE

Treasury rates experiencing periods of higher volatility



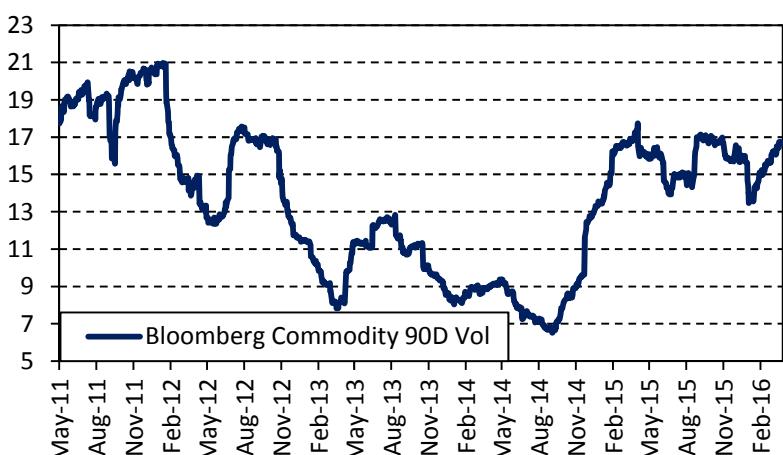
Source: Bloomberg, Merrill Lynch

Sustained uptick in currency volatilities



Source: Bloomberg, Deutsche Bank

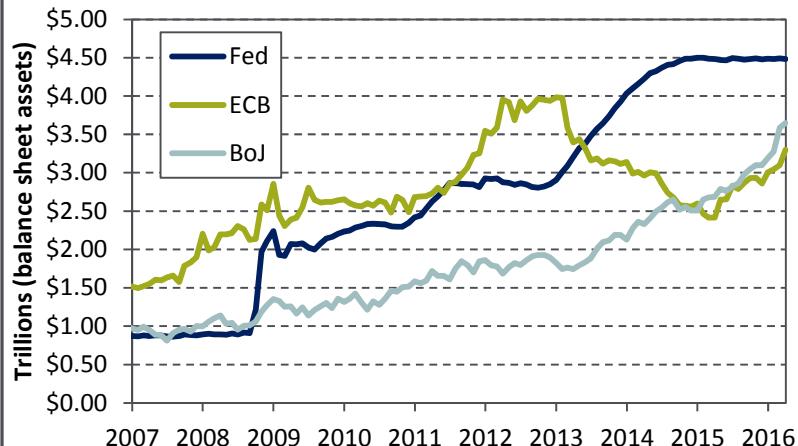
Commodity pricing volatility has increased



Source: Bloomberg, Merrill Lynch

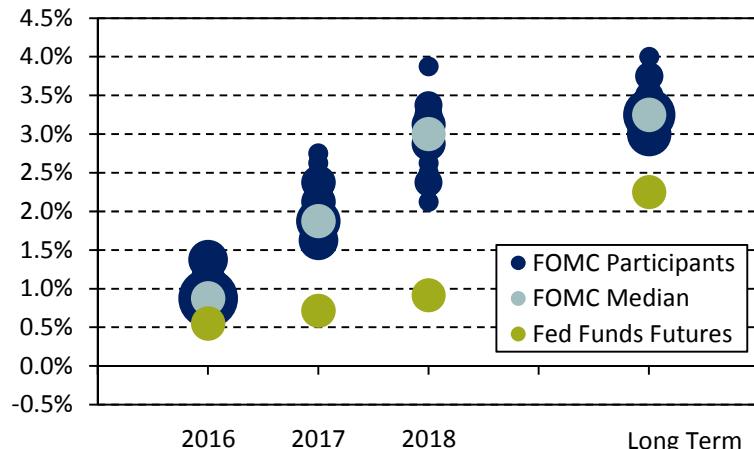
San Bernardino County Employees' Retirement Association
Central Banks

Major central bank policy divergence



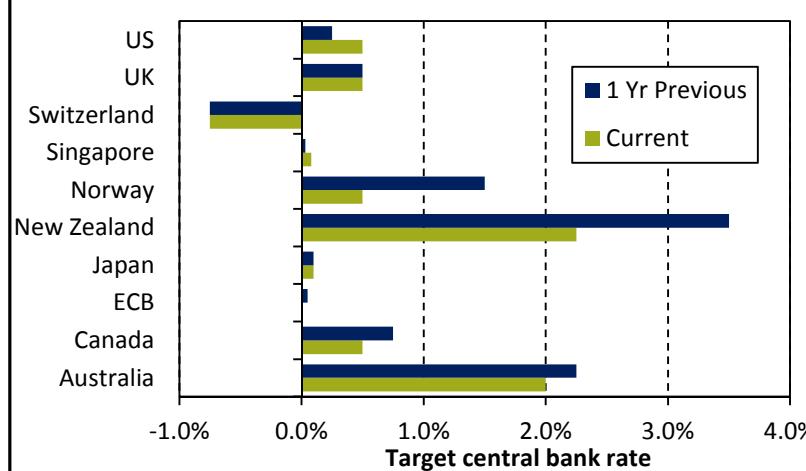
Source: Bloomberg, Federal Reserve, Bank of Japan, ECB, NEPC

Fed's ideal rate of policy firming above market expectations



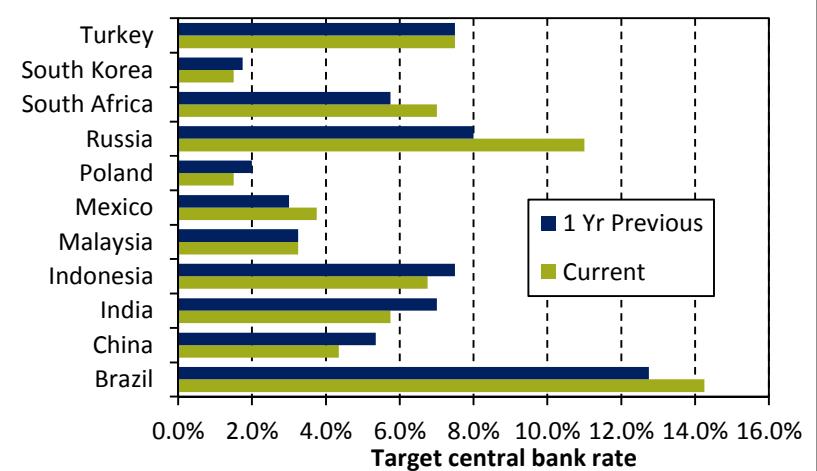
Source: Bloomberg, Federal Reserve, NEPC

Many developed central banks have maintained low interest rates



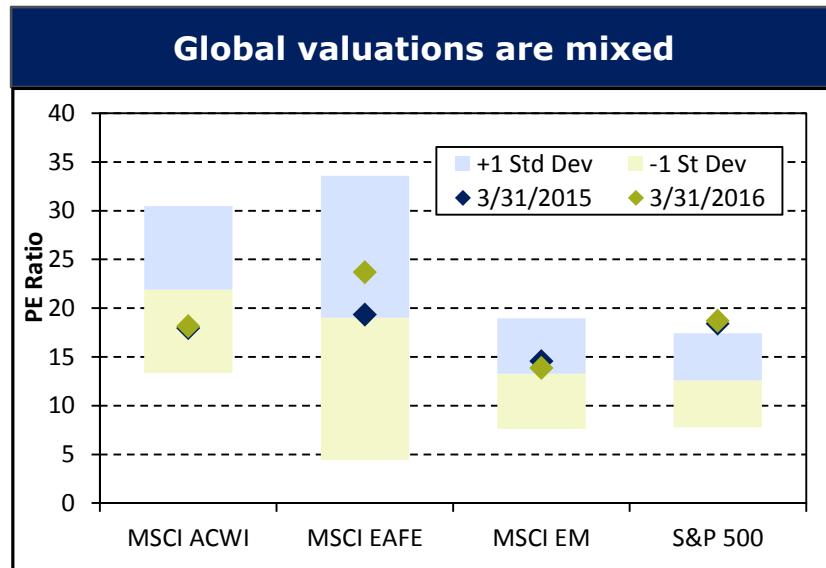
Source: Bloomberg

EM central bank policies have varied by circumstance

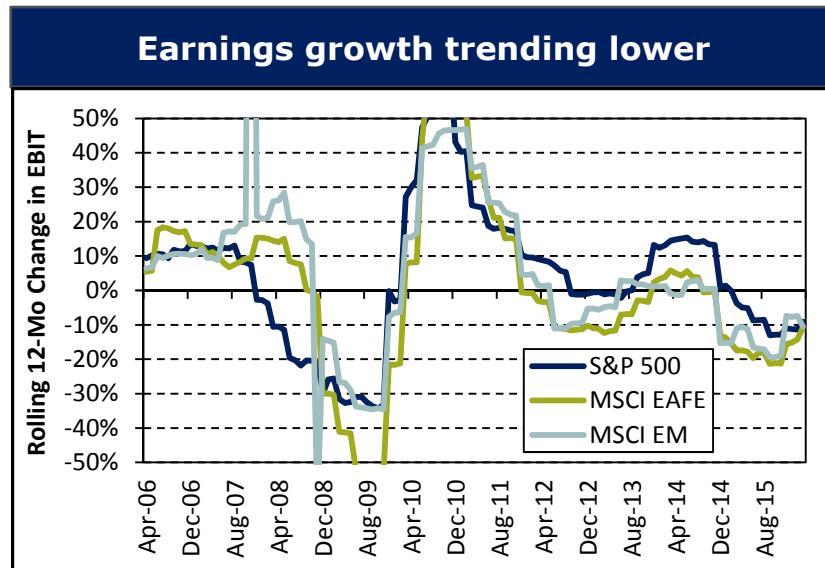


Source: Bloomberg

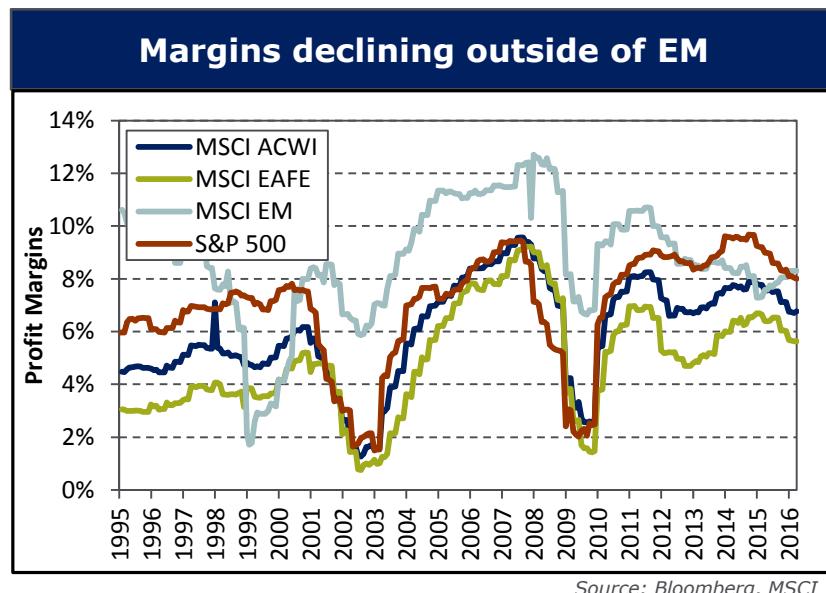
San Bernardino County Employees' Retirement Association
Global Equity



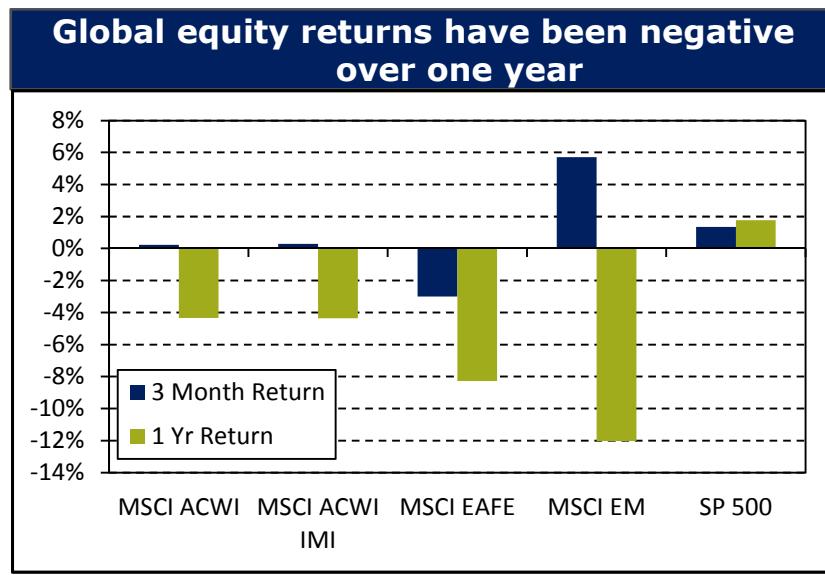
Source: Bloomberg, Standard and Poors, MSCI *MSCI EAFE is ex UK Telecom



Source: Bloomberg, Standard and Poors, MSCI



Source: Bloomberg, MSCI



Source: Bloomberg, MSCI

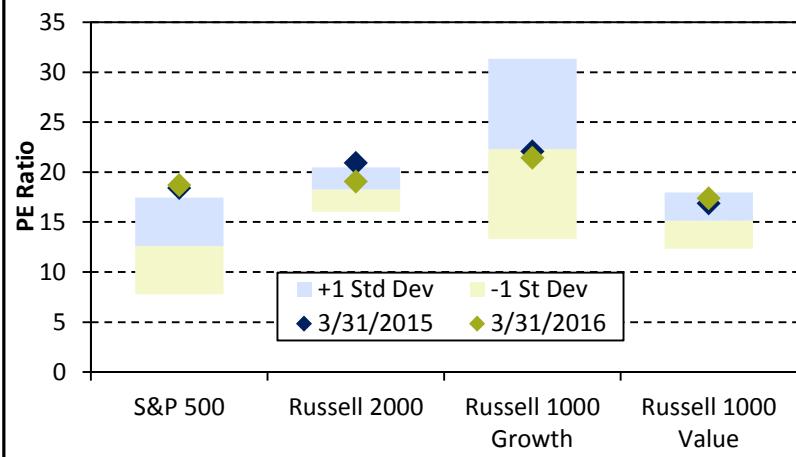


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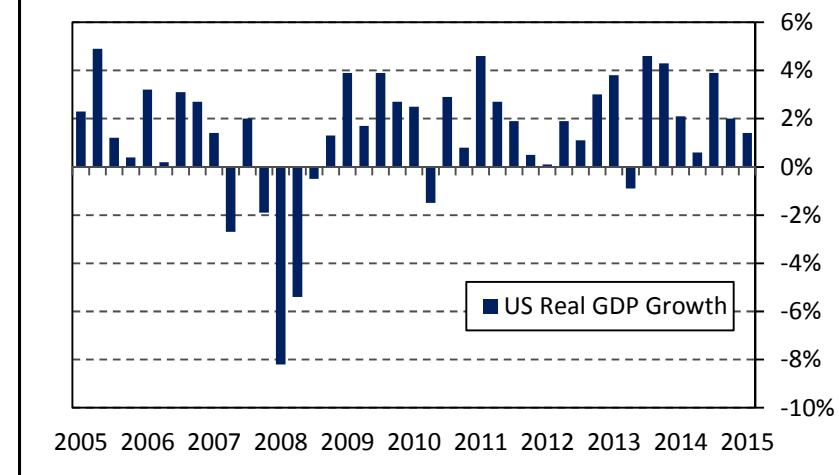
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San Bernardino County Employees' Retirement Association
US Equity

Valuations near or above historical norms

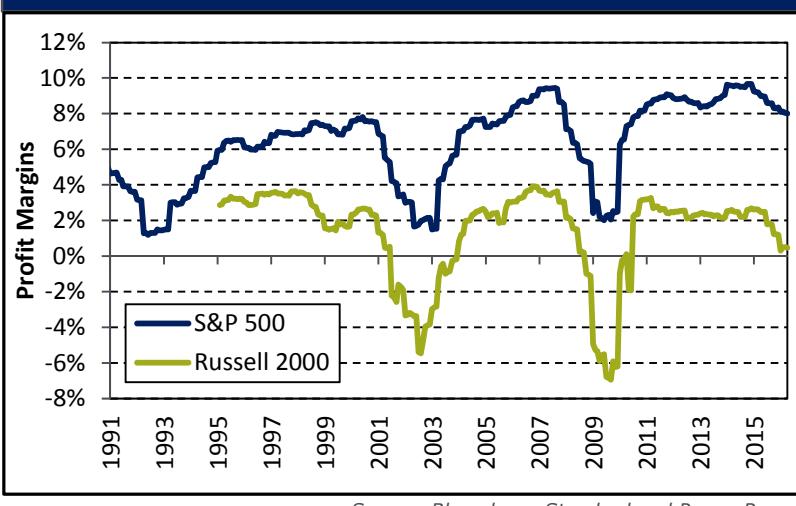


Growth recovery marked by inconsistency



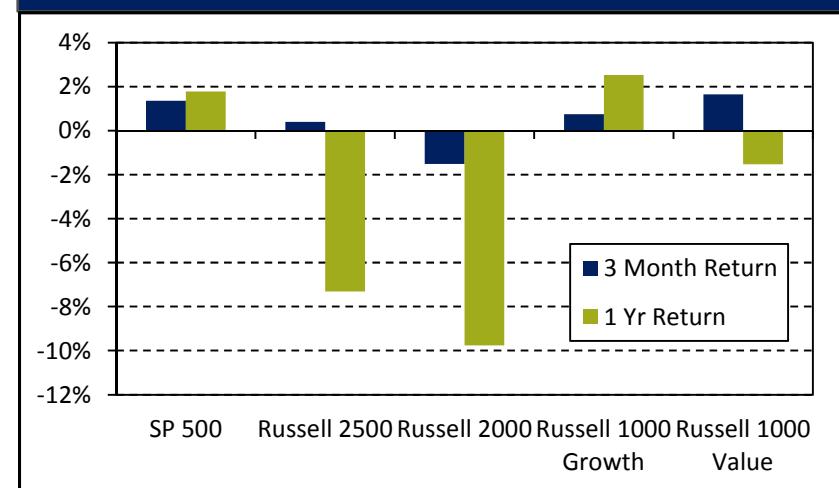
Source: Bloomberg, Standard and Poors, Russell *Russell 2000 PE is index adjusted positive

Profit margins lower off highs



Source: Bloomberg, Standard and Poors, Russell

Trailing performance has been mixed



Source: Bloomberg, Standard and Poors, Russell

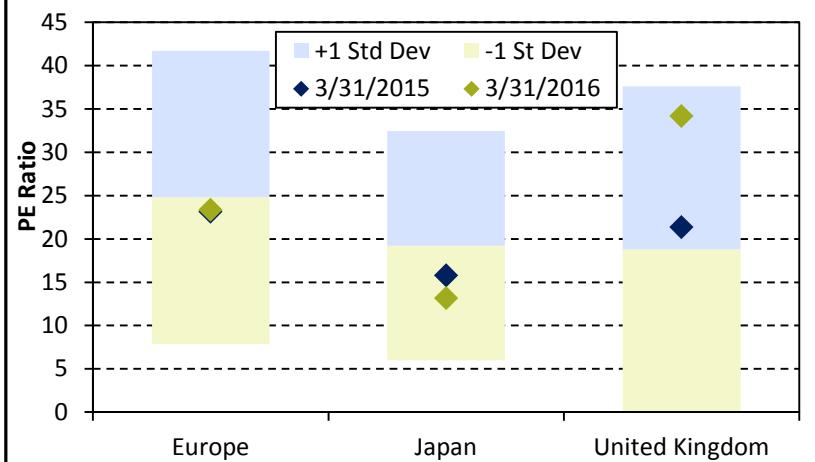


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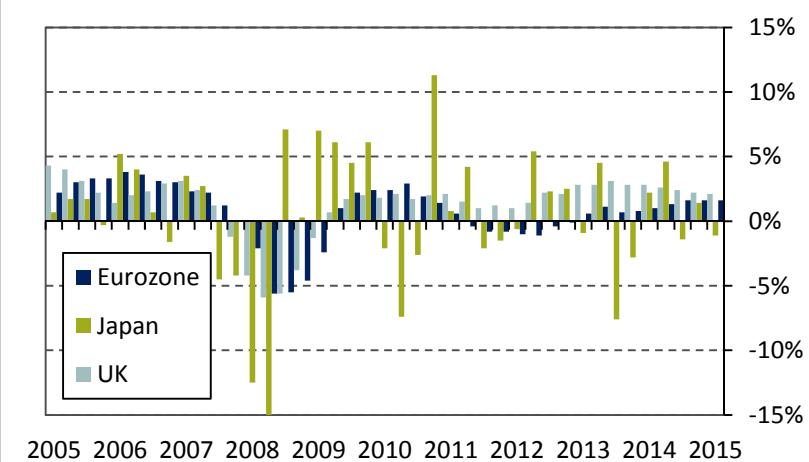
San Bernardino County Employees' Retirement Association
International Equity

PEs varied by region/country



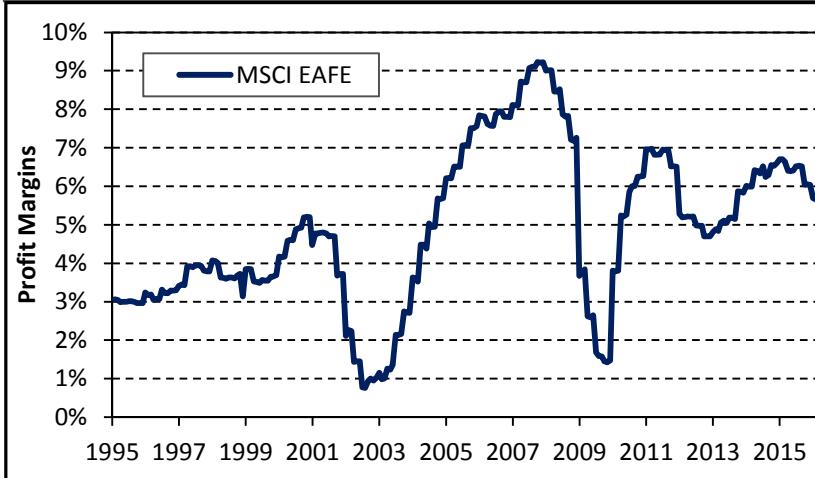
Source: Bloomberg, MSCI, FTSE *UK represented by FTSE 100 Index

Slow Global Growth



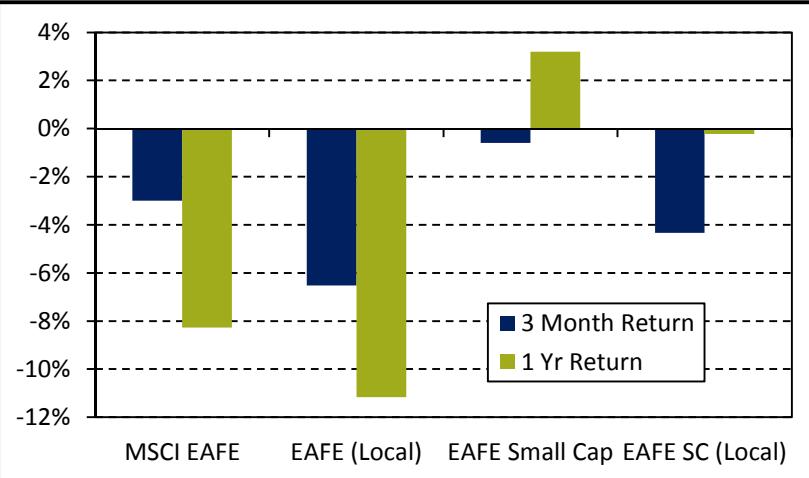
Source: Bloomberg

Margins elevated but not at extremes



Source: Bloomberg, MSCI

Returns near flat or negative



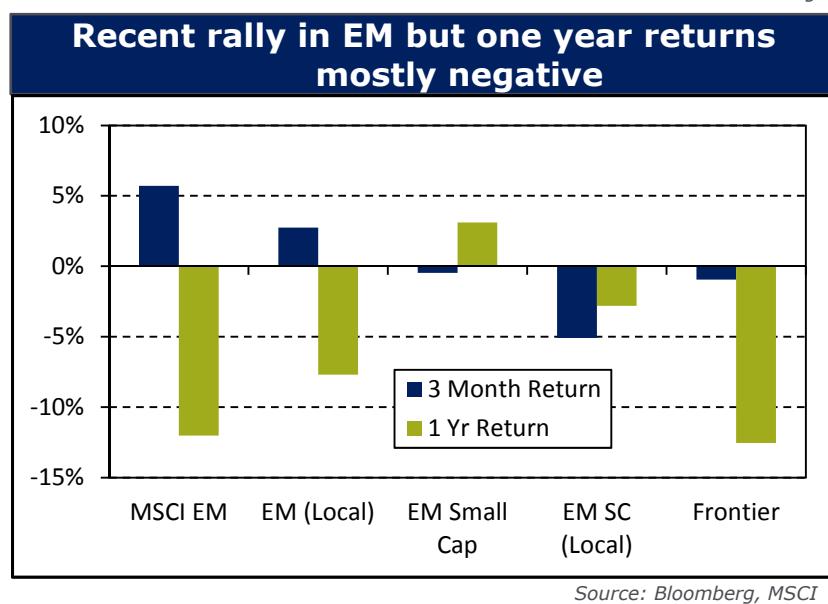
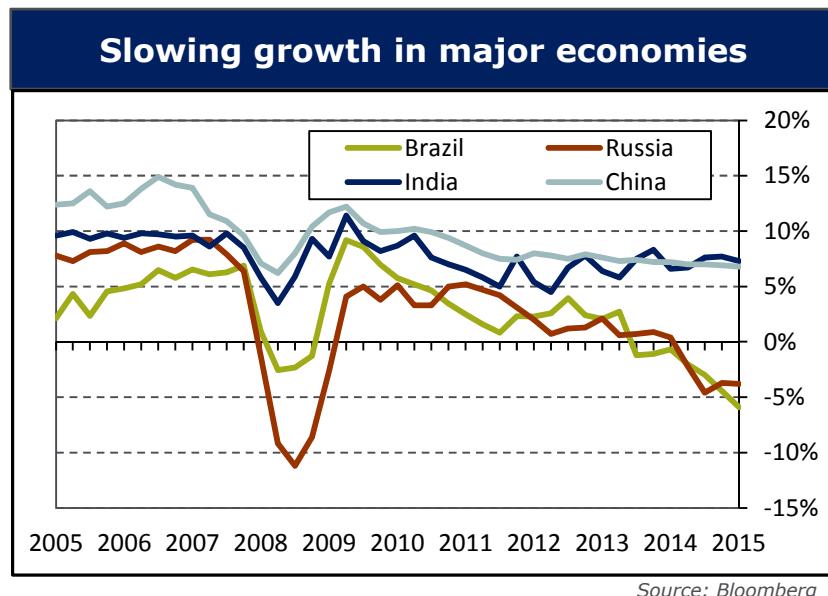
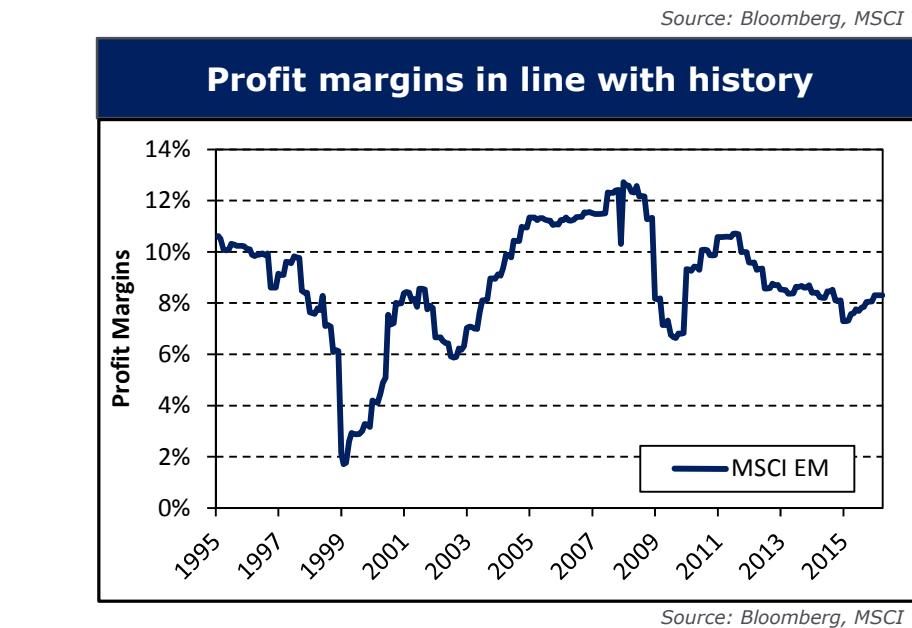
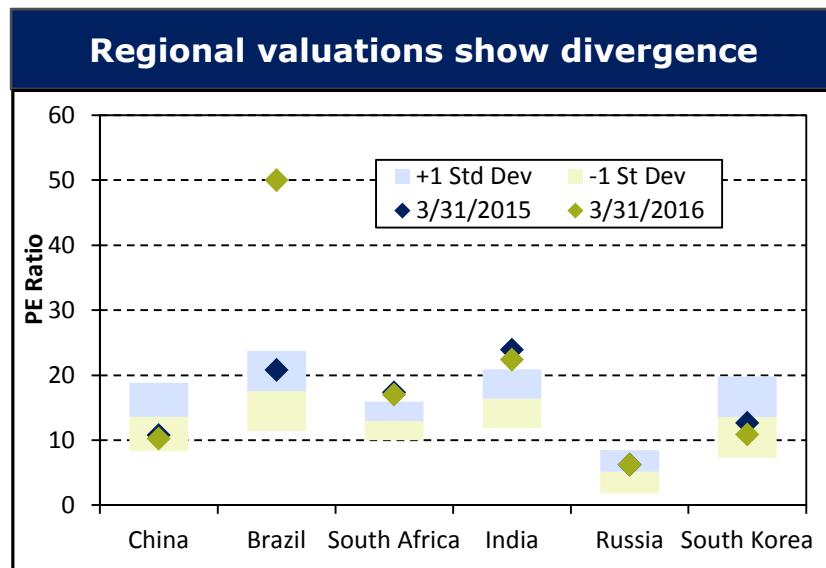
Source: Bloomberg, MSCI



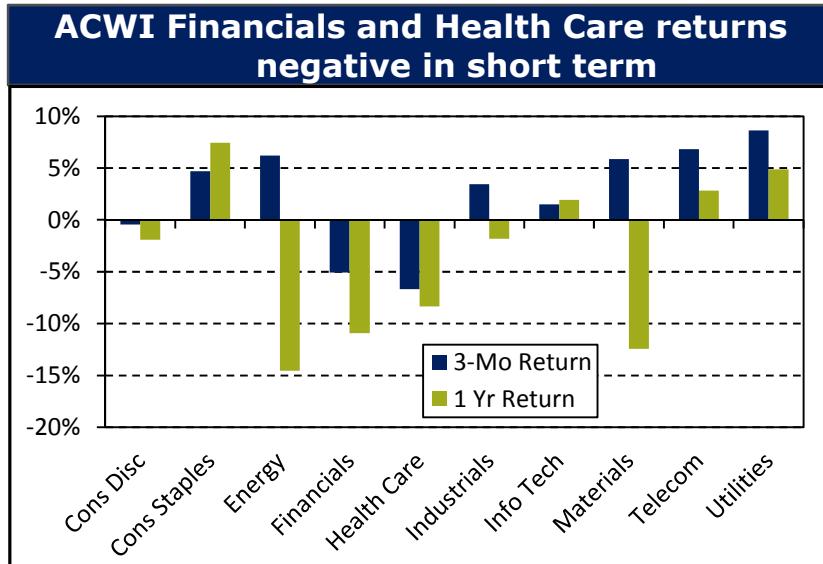
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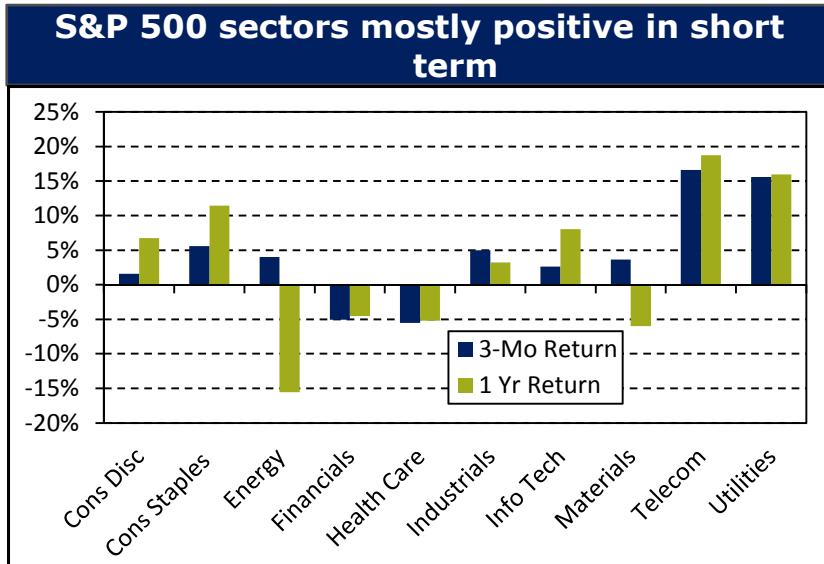
San Bernardino County Employees' Retirement Association
Emerging Markets Equity



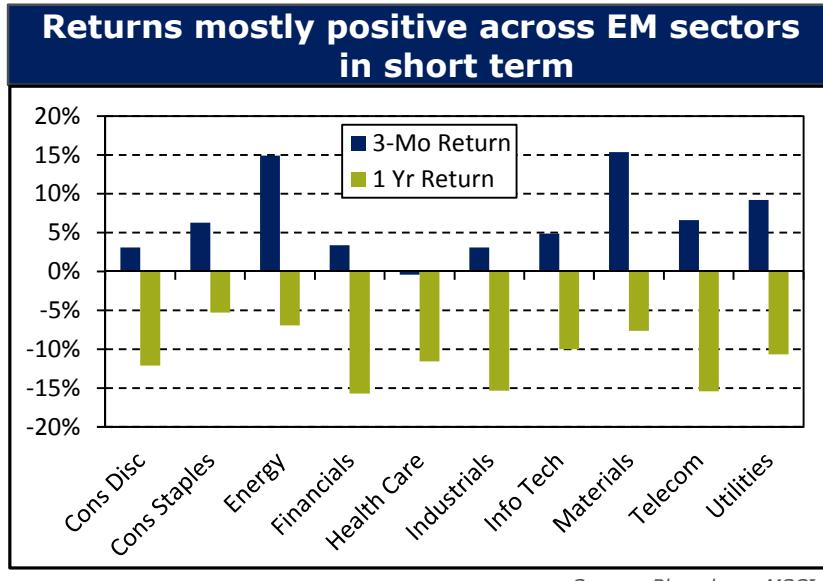
San Bernardino County Employees' Retirement Association
Global Equity by Sector



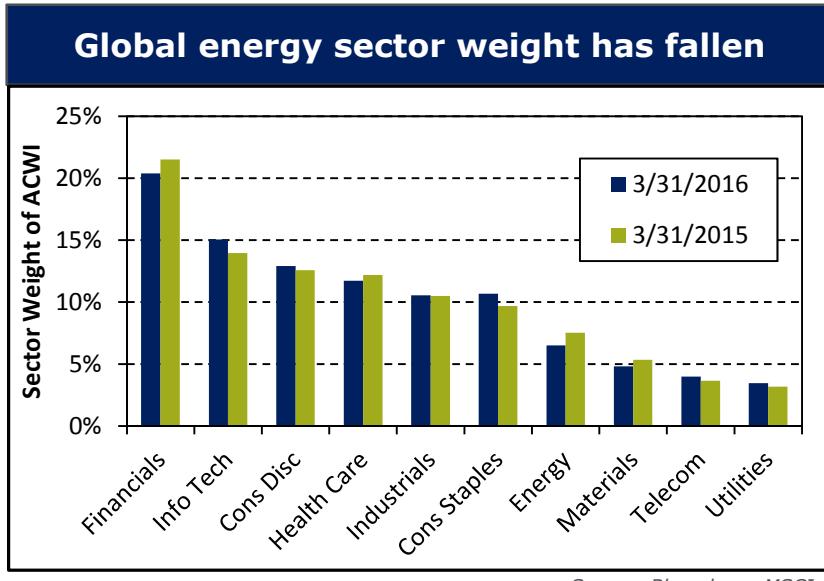
Source: Bloomberg, MSCI



Source: Bloomberg, Standard and Poors



Source: Bloomberg, MSCI



Source: Bloomberg, MSCI

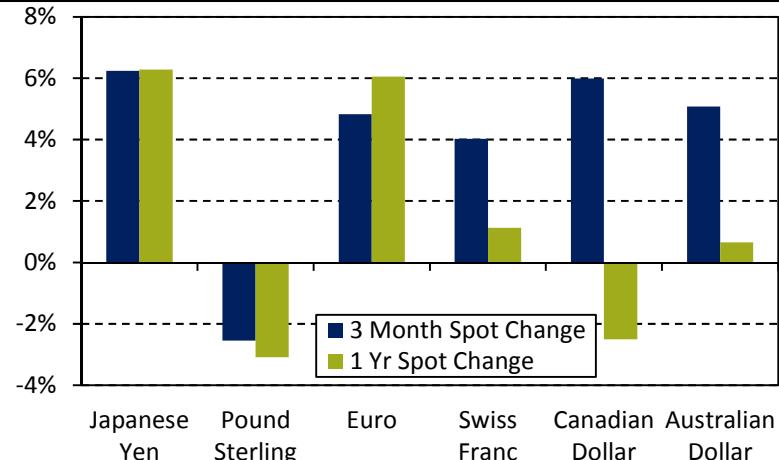


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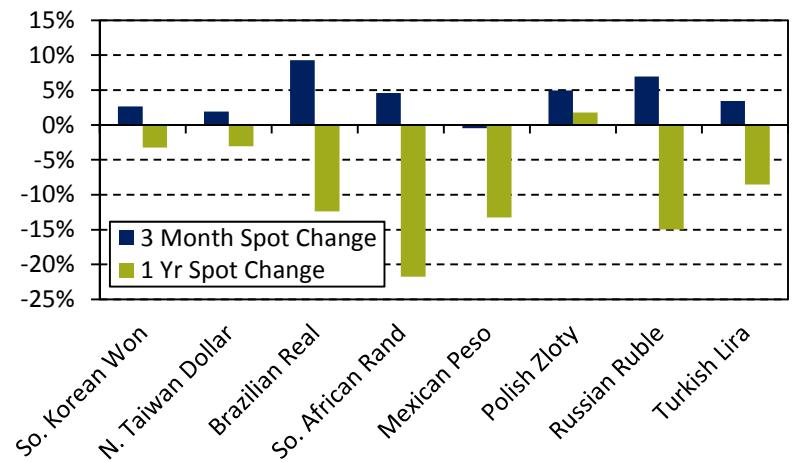
San Bernardino County Employees' Retirement Association
Currencies

Developed currencies mostly positive versus the dollar recently



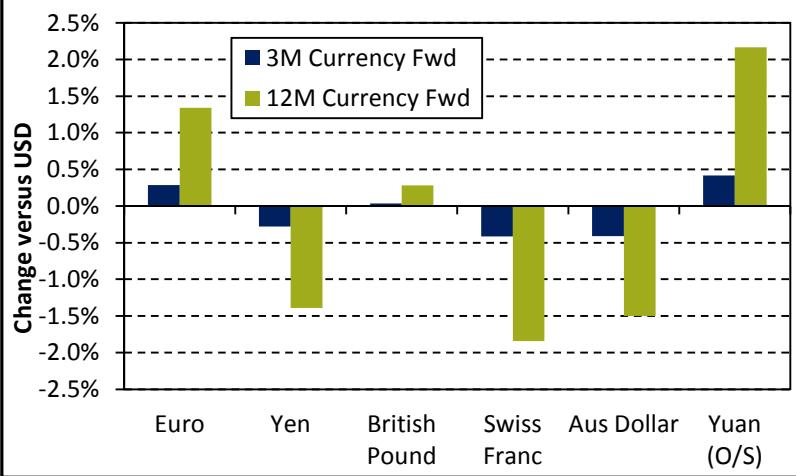
Source: Bloomberg

EM currencies suffered in unique fashions over the past year



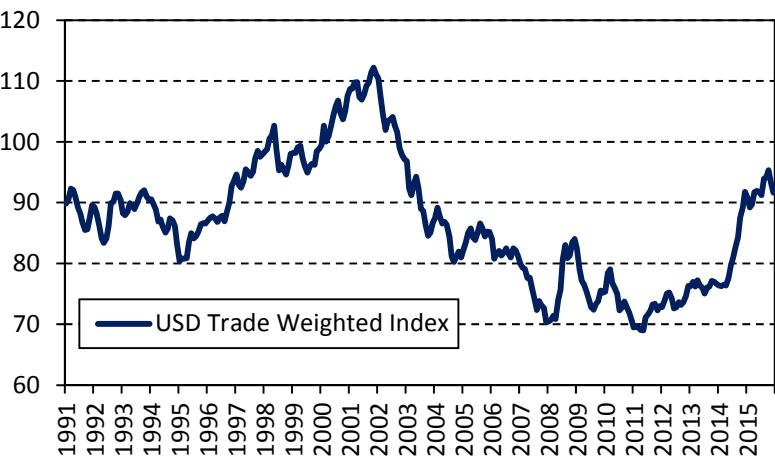
Source: Bloomberg

Yen expected to decline versus USD



Source: Bloomberg

Recent dollar strength pronounced



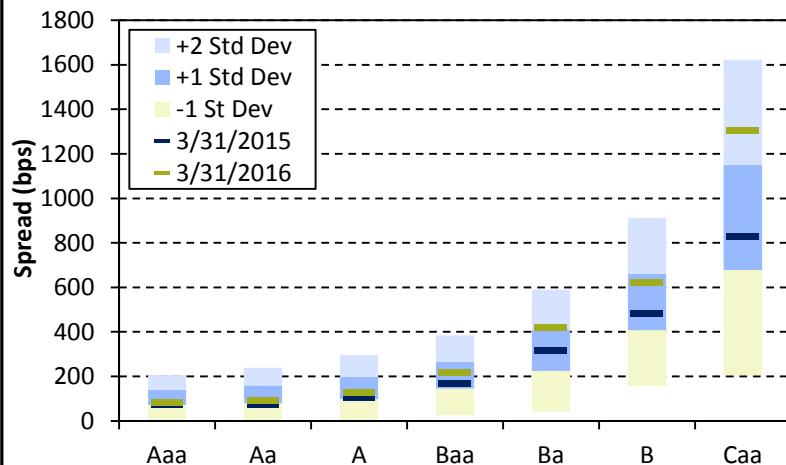
Source: Bloomberg, Federal Reserve



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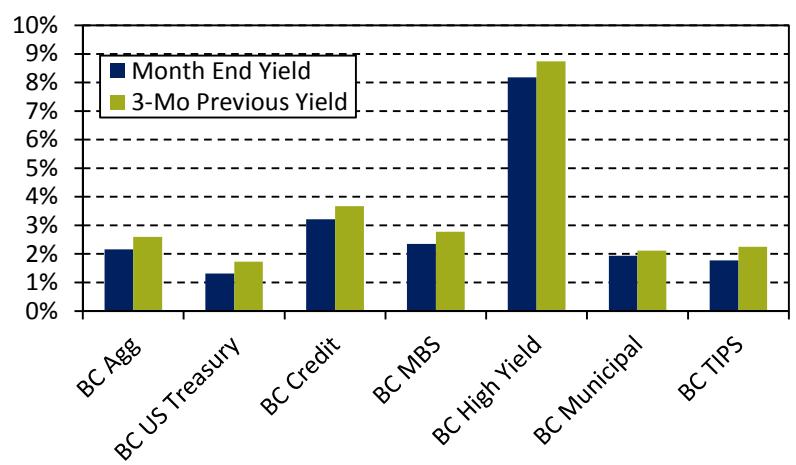
March 31, 2016

Spread levels above historical medians



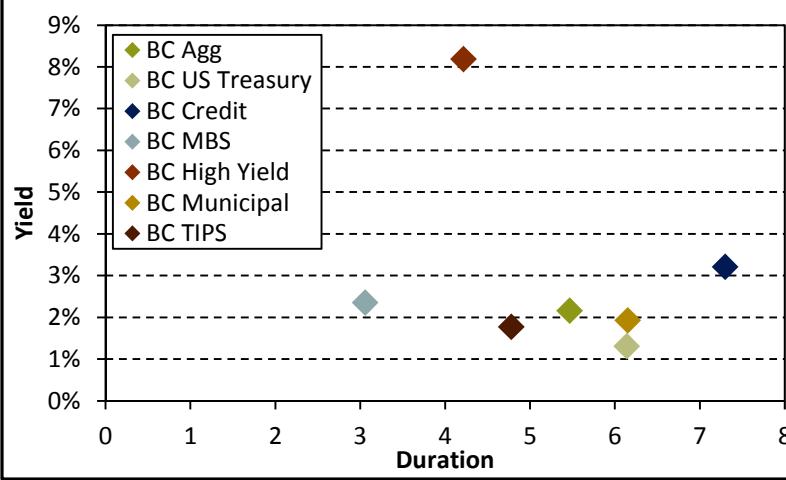
Source: Bloomberg, Barclays

Yields have mostly declined



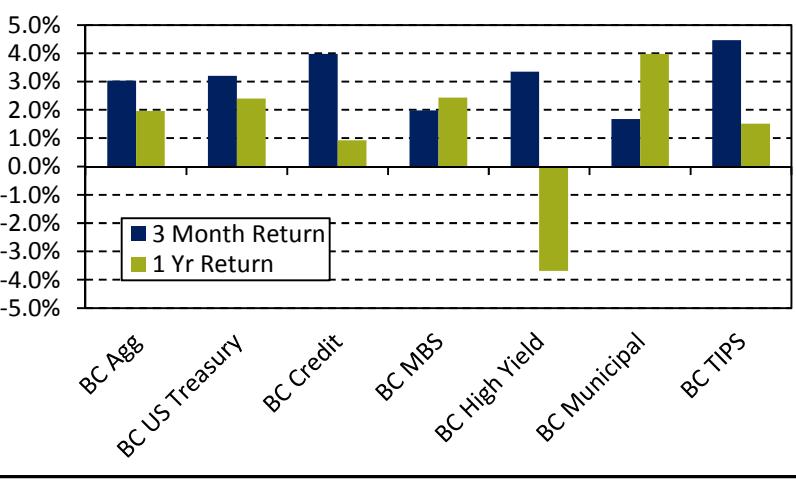
Source: Bloomberg, Barclays

Similar yield/duration tradeoff among major US indices



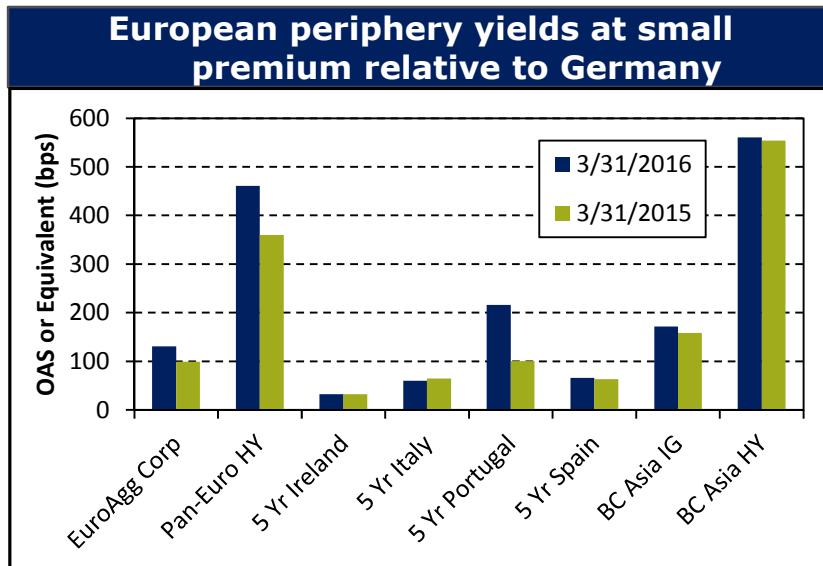
Source: Bloomberg, Barclays

Returns marked by recent credit rally

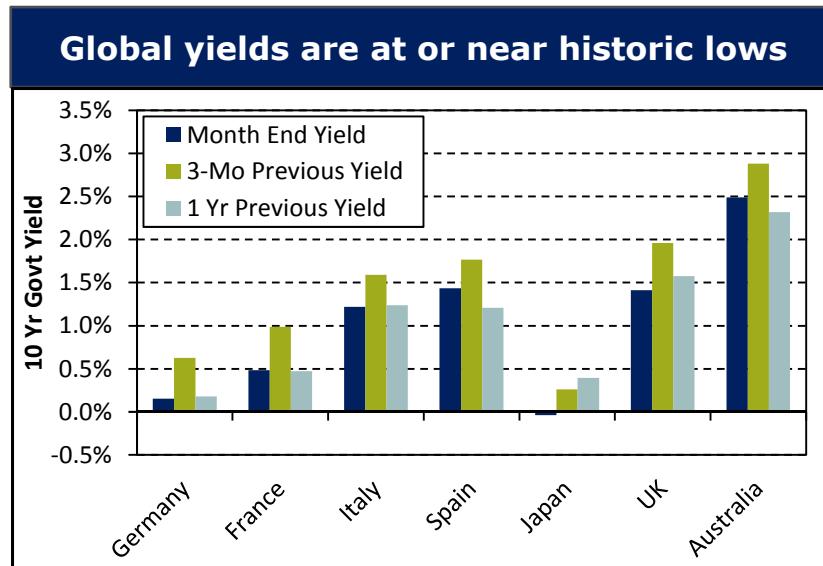


Source: Bloomberg, Barclays

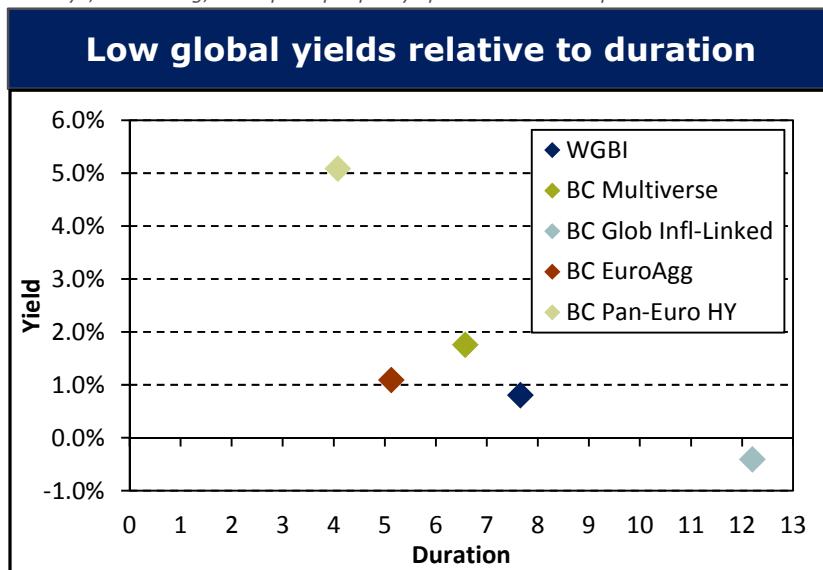
San Bernardino County Employees' Retirement Association
International Developed Fixed Income



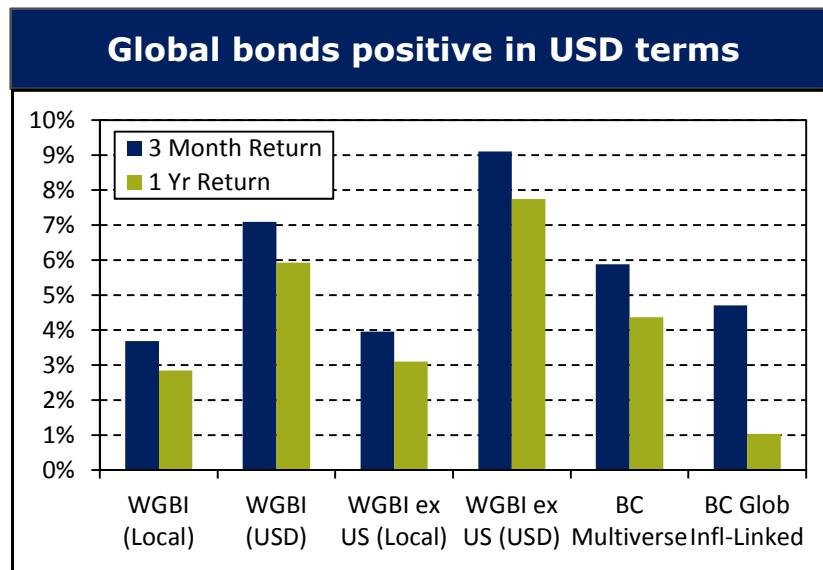
Source: Barclays, Bloomberg, *European periphery spreads are over equivalent German Bund



Source: Bloomberg



Source: Bloomberg, Citigroup, Barclays



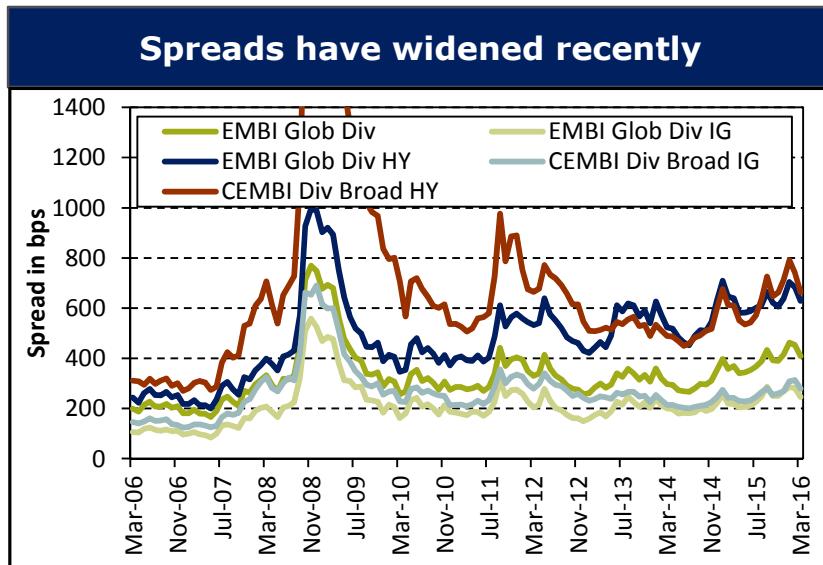
Source: Bloomberg, Citigroup, Barclays



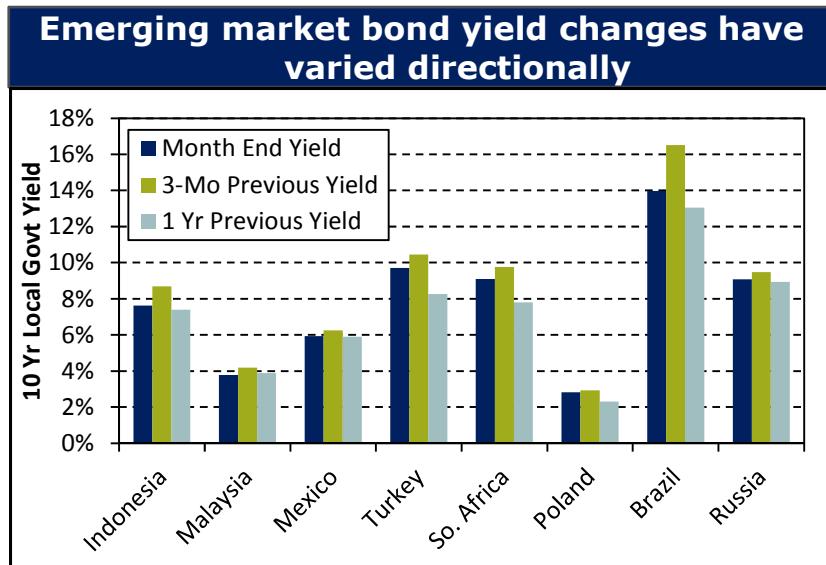
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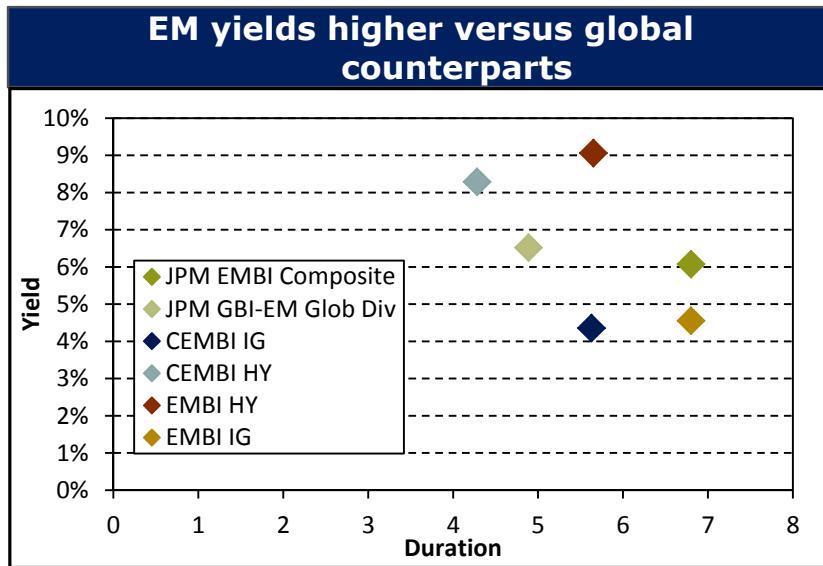
San Bernardino County Employees' Retirement Association
Emerging Markets Fixed Income



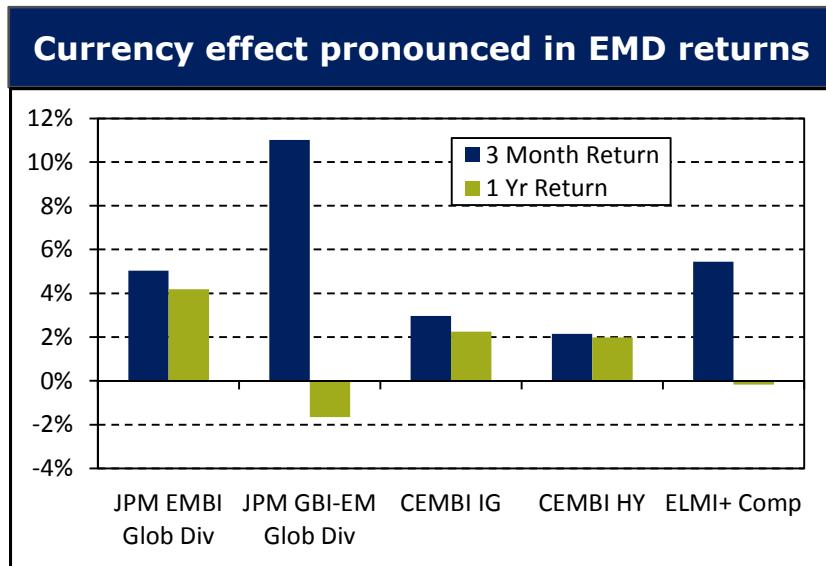
Source: Bloomberg, JP Morgan



Source: Bloomberg



Source: Bloomberg, JP Morgan



Source: Bloomberg, JP Morgan

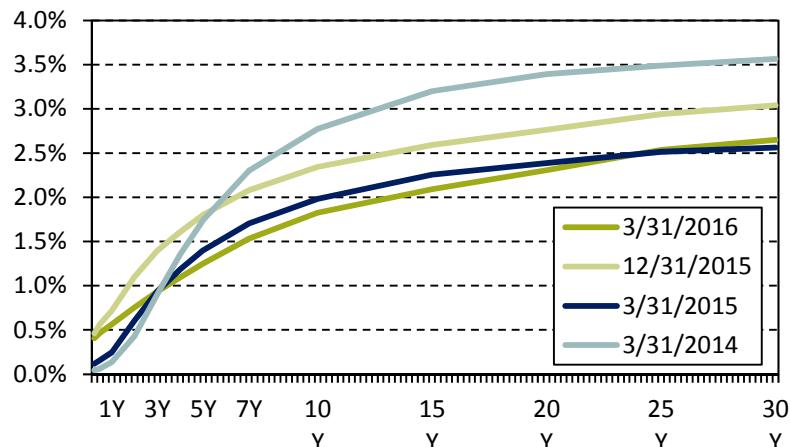


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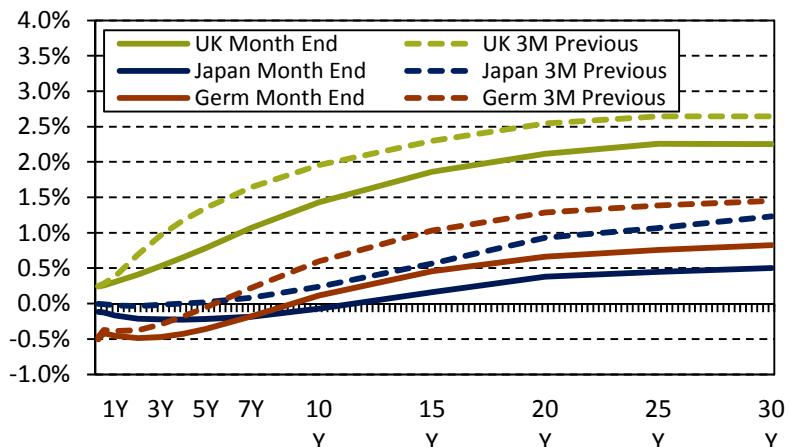
San Bernardino County Employees' Retirement Association
Rates

Treasury yield curve has declined since year end



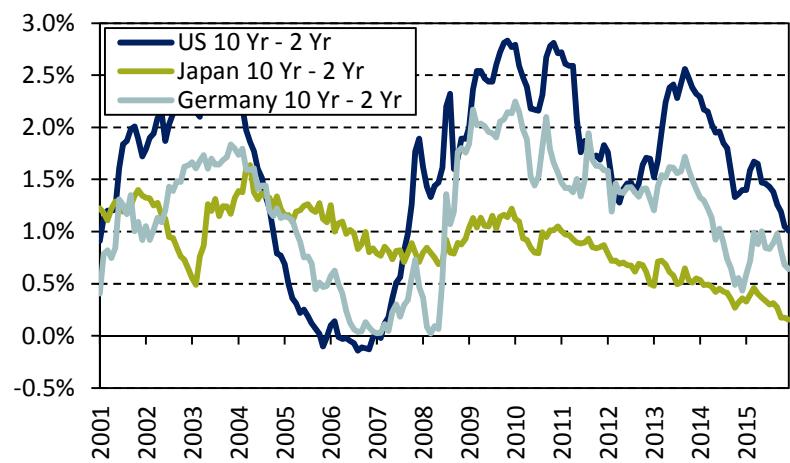
Source: Bloomberg

Global yield curves have shifted downwards



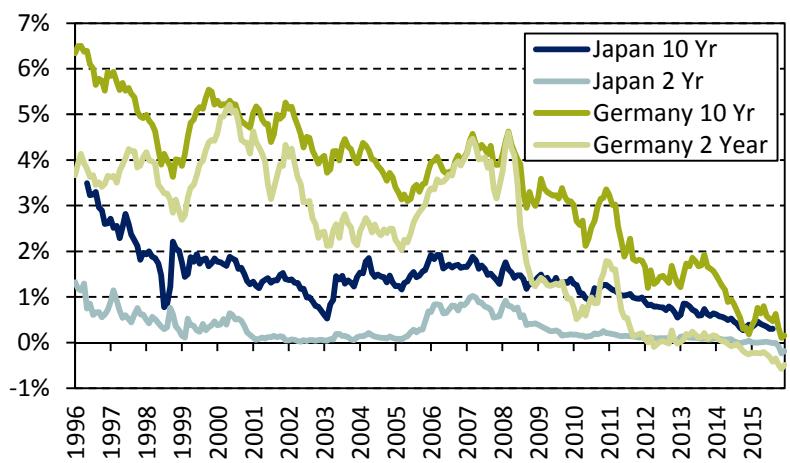
Source: Bloomberg

Global yield curves trending lower



Source: Bloomberg

Global yields have trended lower over long term



Source: Bloomberg

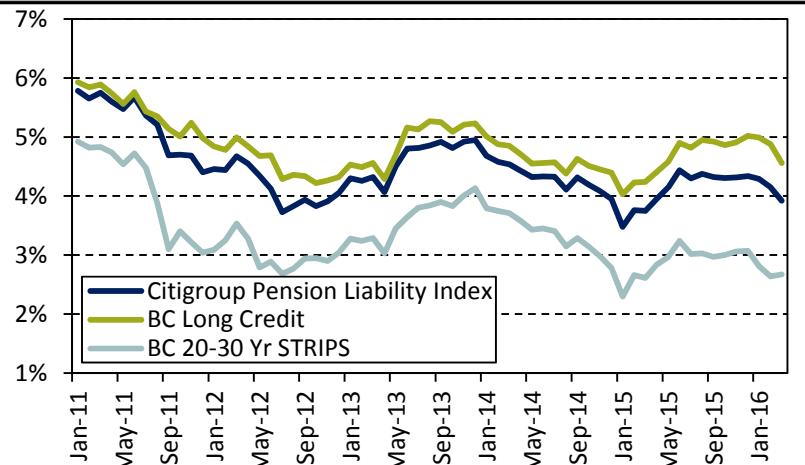


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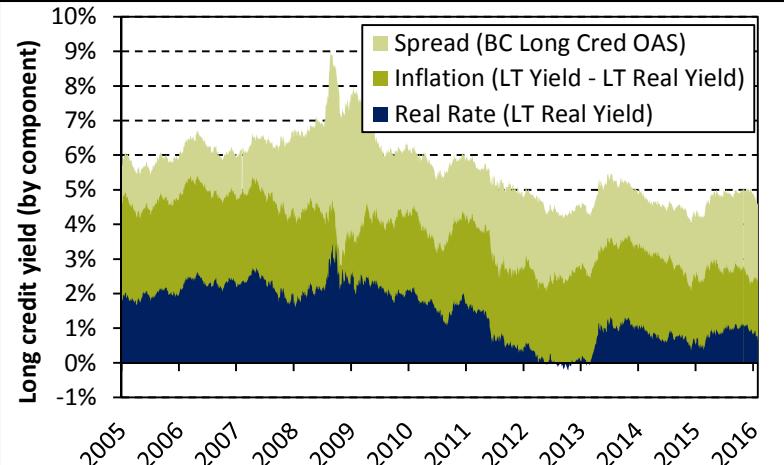
San Bernardino County Employees' Retirement Association
Long Rates and Liability

Long duration yields have fallen over last few years even with recent uptick



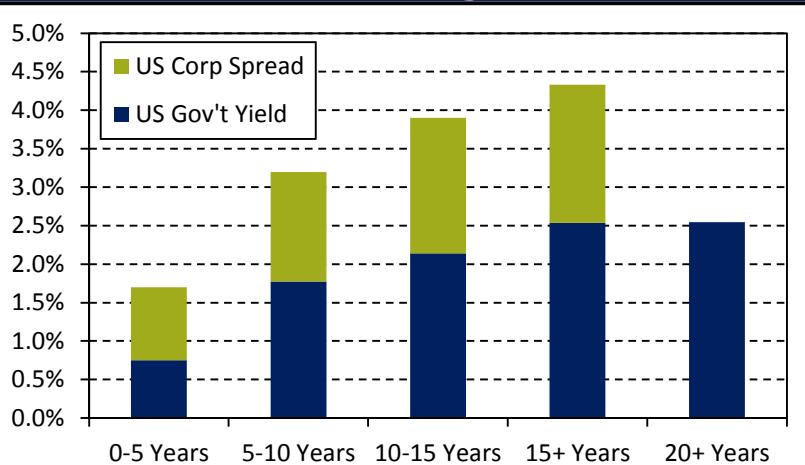
Source: Bloomberg, Citigroup, Barclays

Lower yields driven by low inflation expectations and real rates



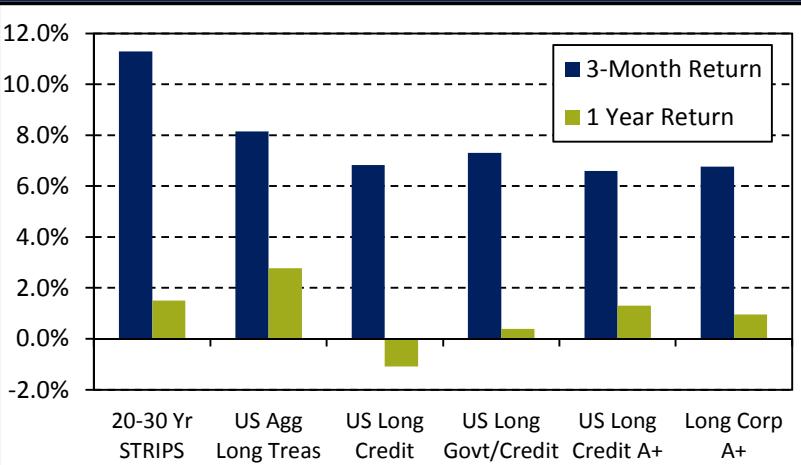
Source: Bloomberg, US Treasury, Barclays, NEPC

Yields are low but spreads above historic averages



Source: Bloomberg, BofA Merrill Lynch, Barclays *No index for 20+ year corporate

Returns recently positive



Source: Bloomberg, Barclays

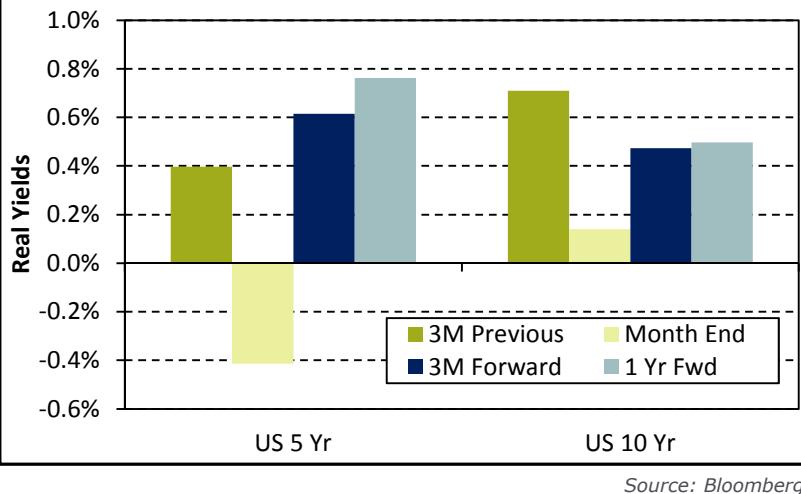


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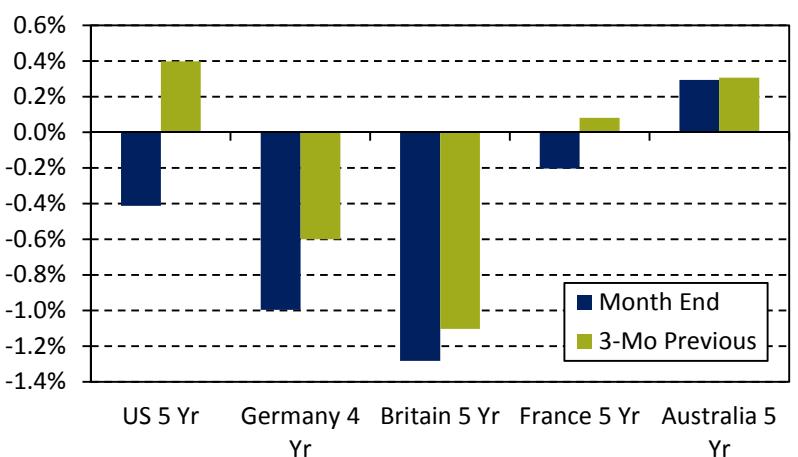
San Bernardino County Employees' Retirement Association
Inflation and Real Rates

US real yields have decreased slightly



Source: Bloomberg

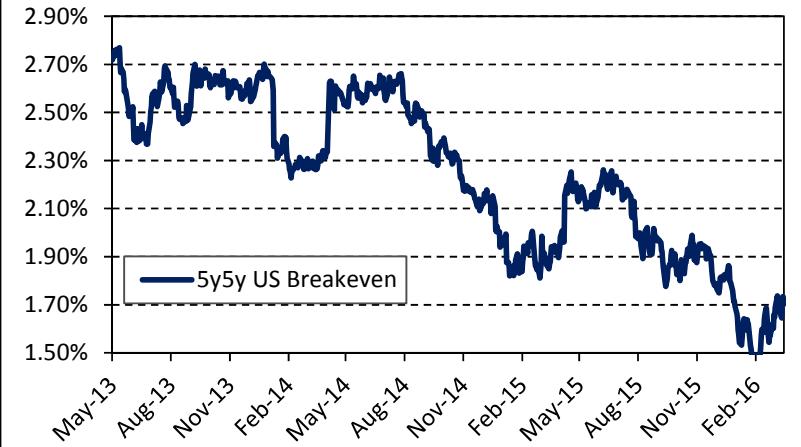
Global real yields mostly negative



*3-Mo data not available for Germany 4 year rate

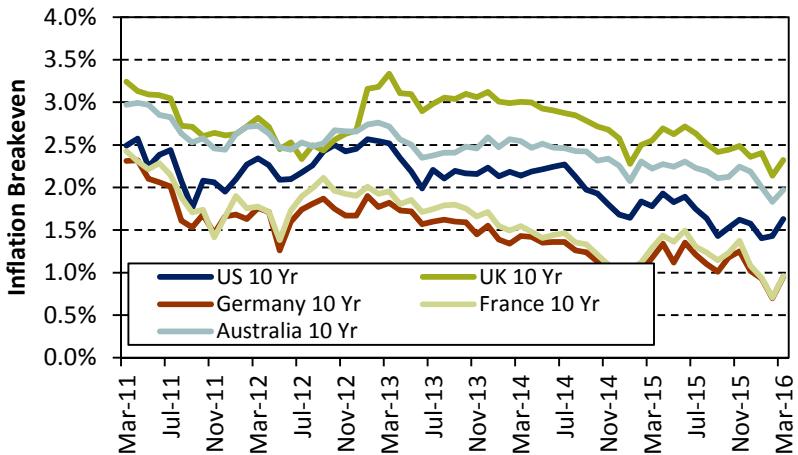
Source: Bloomberg

US inflation expectations very low



Source: Bloomberg

Global inflation expectations have seen recent uptick



Source: Bloomberg

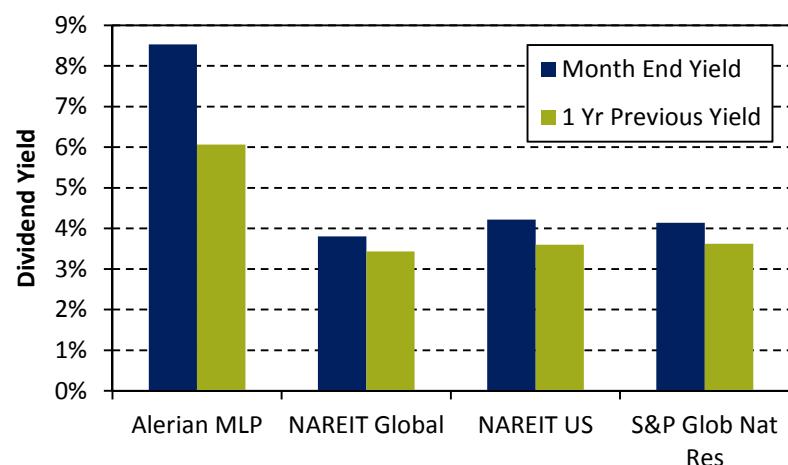


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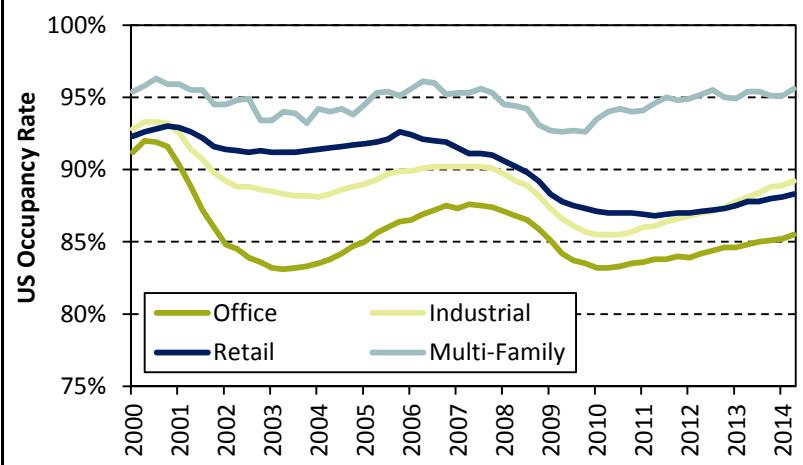
San Bernardino County Employees' Retirement Association
Inflation Sensitive Growth Assets

Yields higher relative to last year



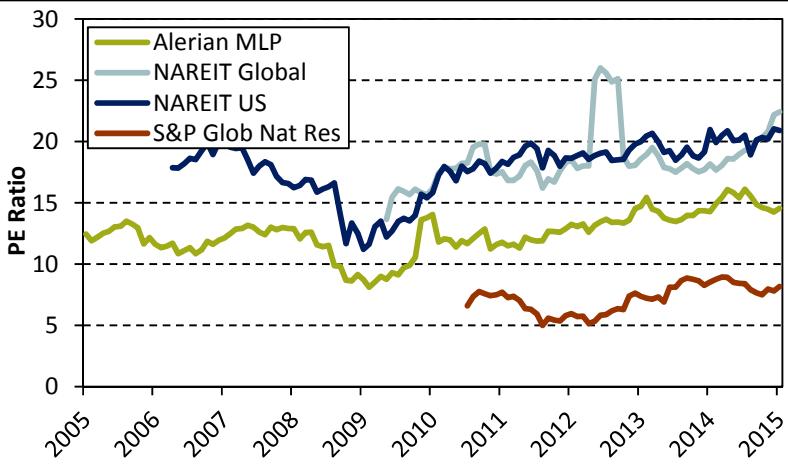
Source: Bloomberg, Alerian, Nareit, Standard and Poors

Gradual recovery in occupancy rates



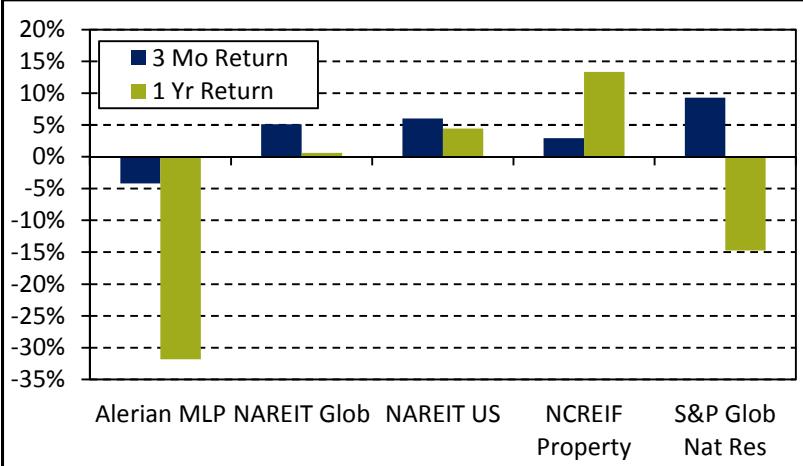
Source: Bloomberg, CB Richard Ellis

PE Ratios near or above averages



Source: Bloomberg, US Census Bureau

Recent MLP selloff and energy pressure



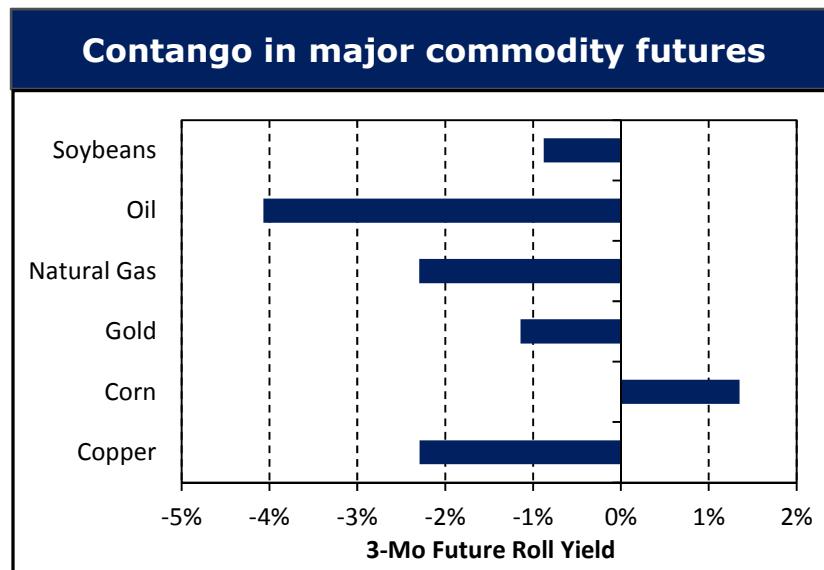
Source: Bloomberg, Alerian, Nareit, Standard and Poors



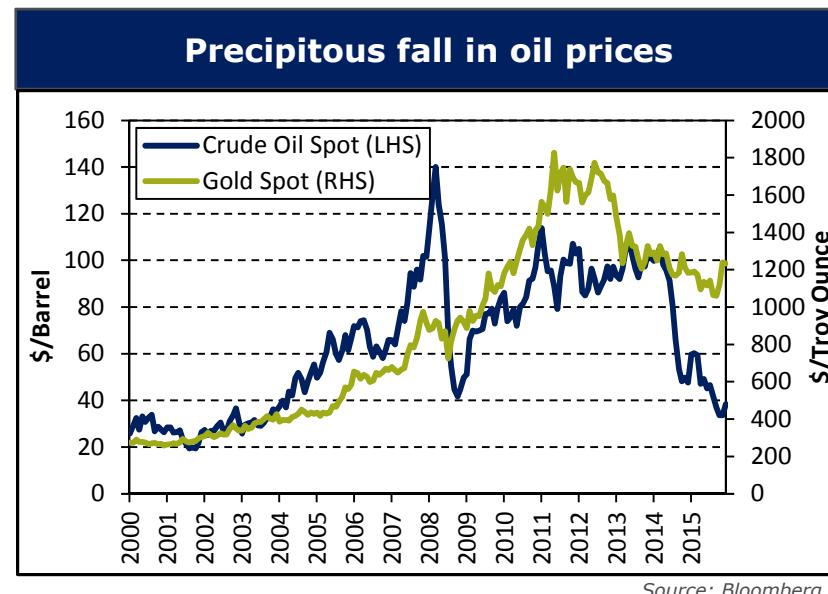
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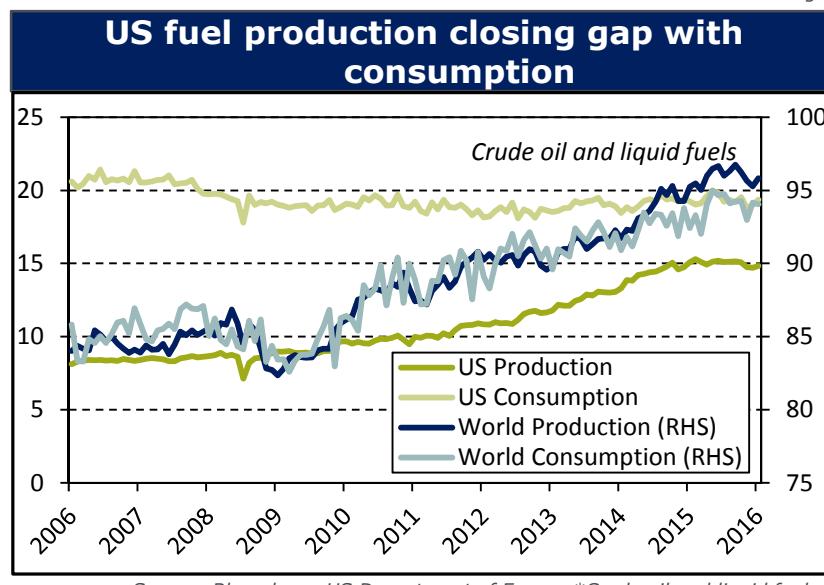
San Bernardino County Employees' Retirement Association
Commodities



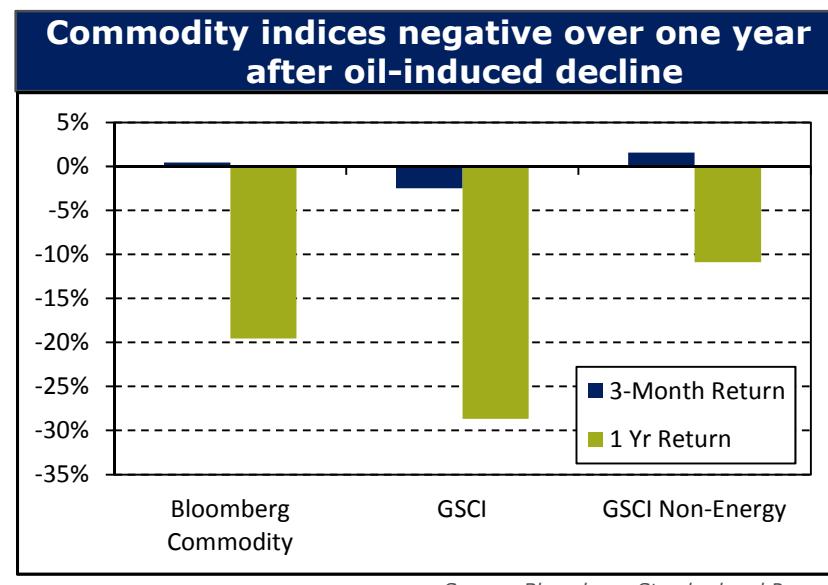
Source: Bloomberg



Source: Bloomberg



Source: Bloomberg, US Department of Energy *Crude oil and liquid fuels



Source: Bloomberg, Standard and Poors



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March 31, 2016

Information Disclaimer and Reporting Methodology

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.